

FIG. 1

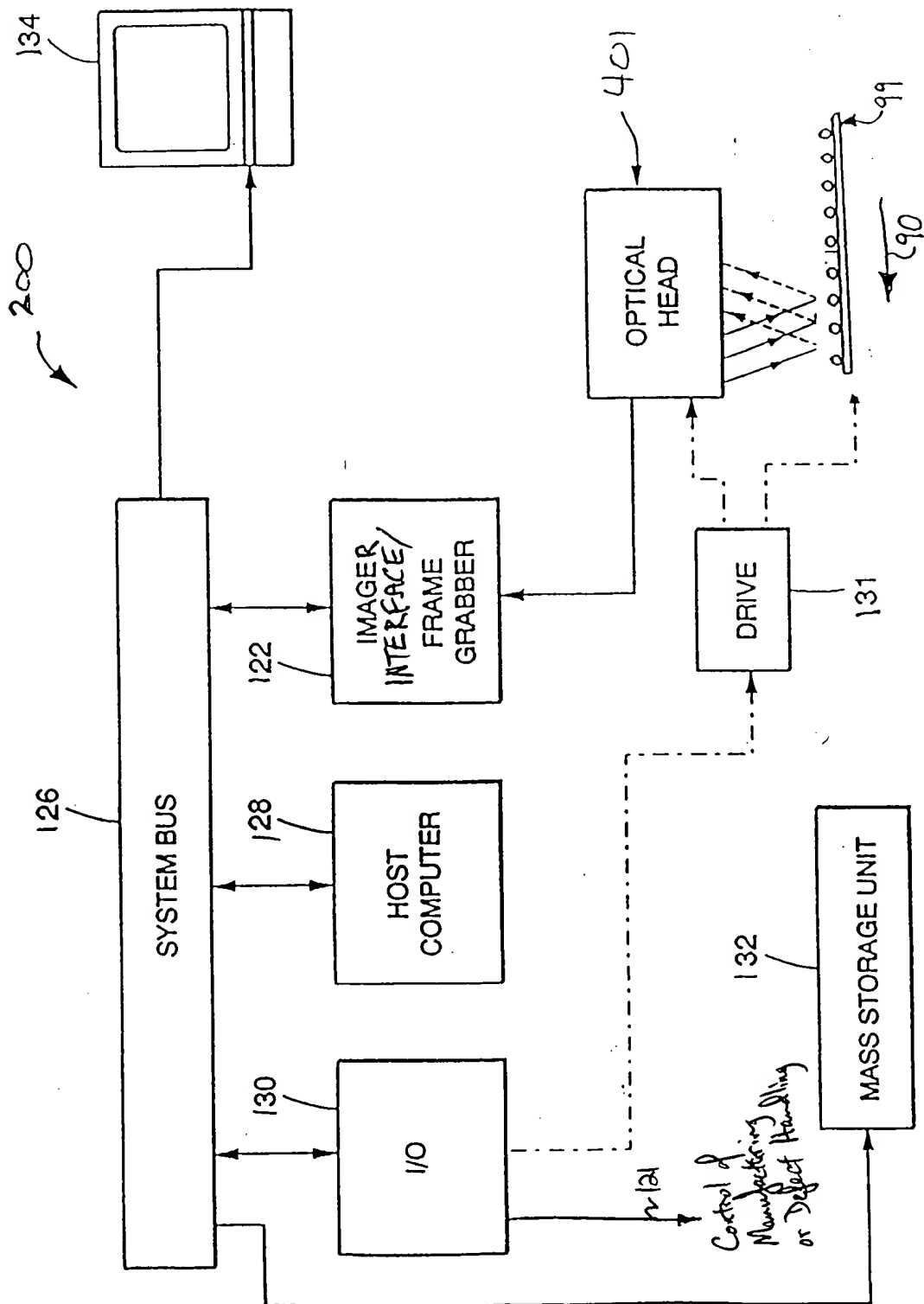


FIG. 2

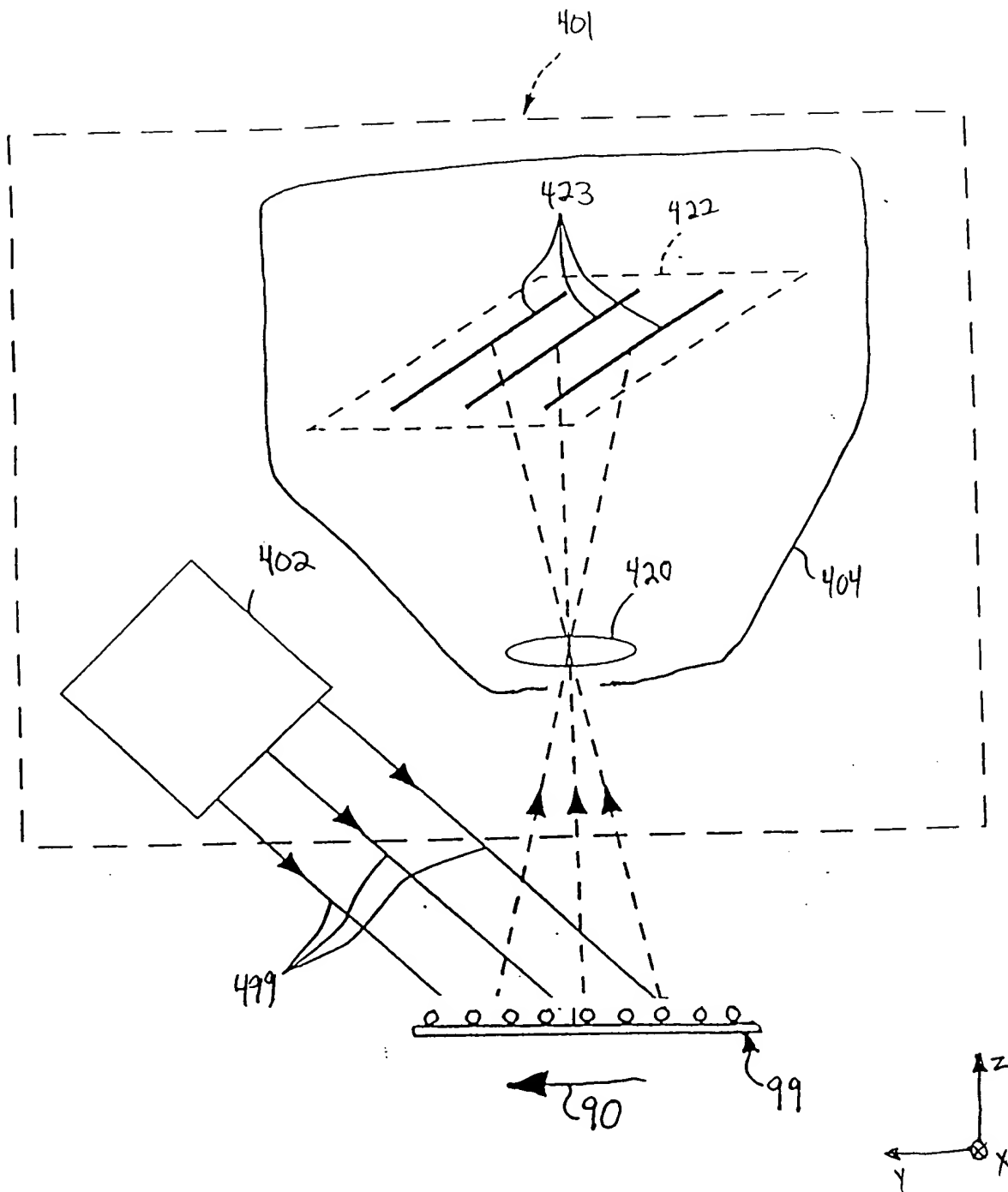


FIG. 3

FIG. 4A is a perspective view of a system 400A for detecting a target 408. The system 400A includes a base 401, a first sensor 410, a second sensor 411, a third sensor 412, a fourth sensor 413, a fifth sensor 414, a sixth sensor 415, a seventh sensor 416, an eighth sensor 417, a ninth sensor 418, a tenth sensor 419, and a target 408. The system 400A is configured to detect the target 408 using the sensors 410-419.

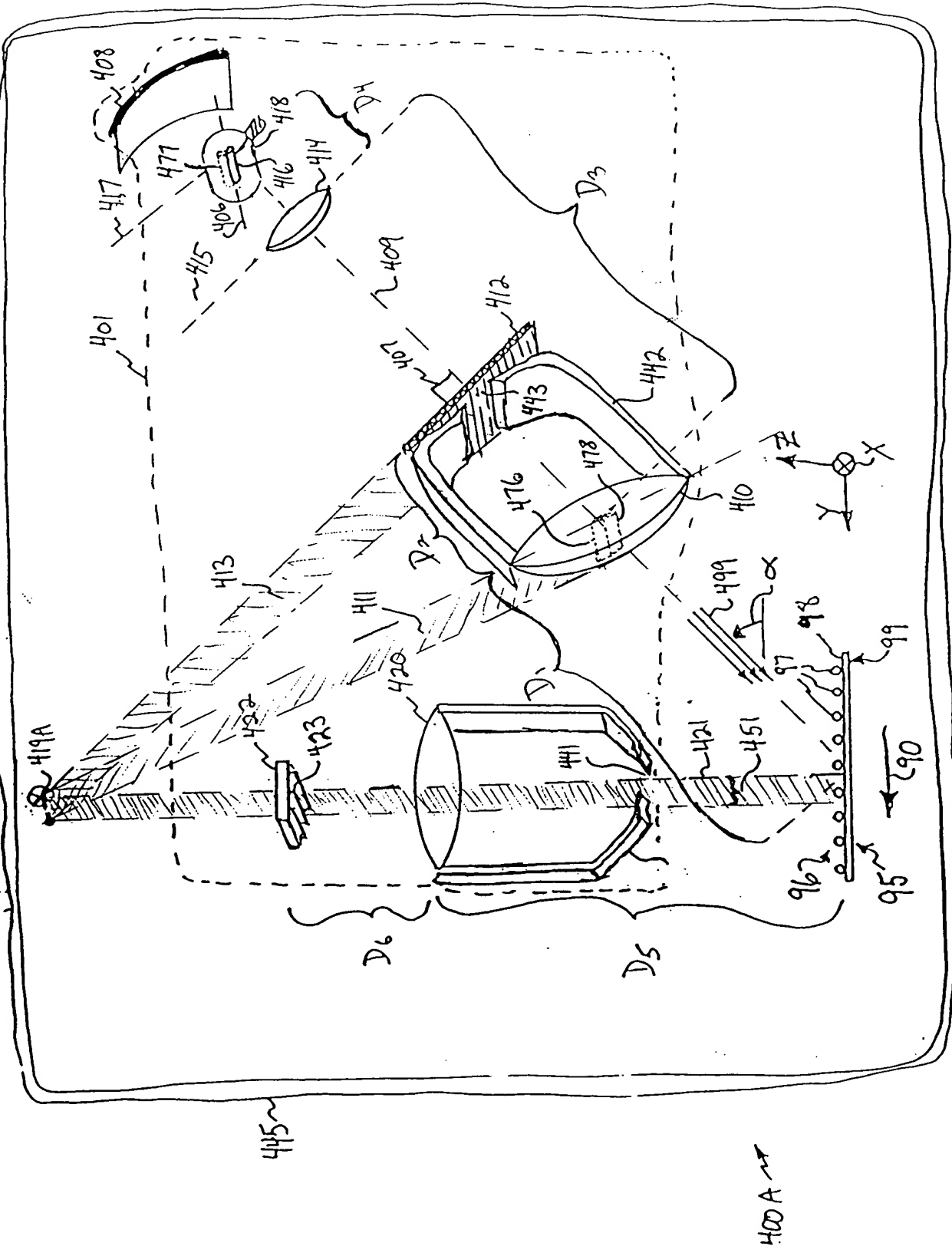


FIG. 4A

FIG. 4B is a schematic diagram of a system 400B for measuring a property of a sample 498. The system 400B includes a light source 419A, a beam splitter 413, a reference beam path 431, a sample beam path 432, a detector 422, and a sample 498. The reference beam path 431 includes a mirror 430. The sample beam path 432 includes a lens 421. The detector 422 is configured to receive light from the sample beam path 432. The system 400B is configured to measure a property of the sample 498 by comparing the intensity of the reference beam 431 and the sample beam 432.

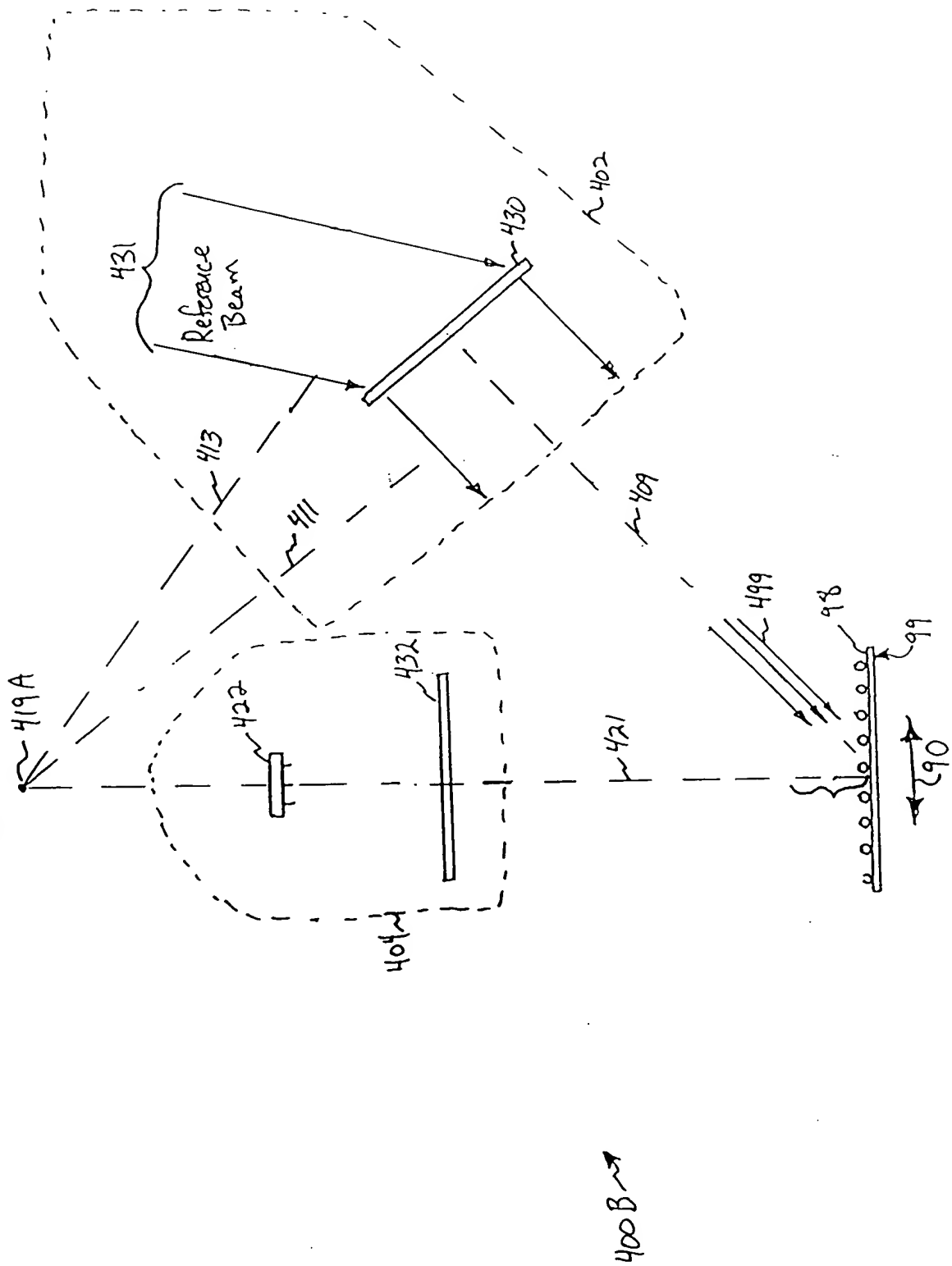


FIG. 4B

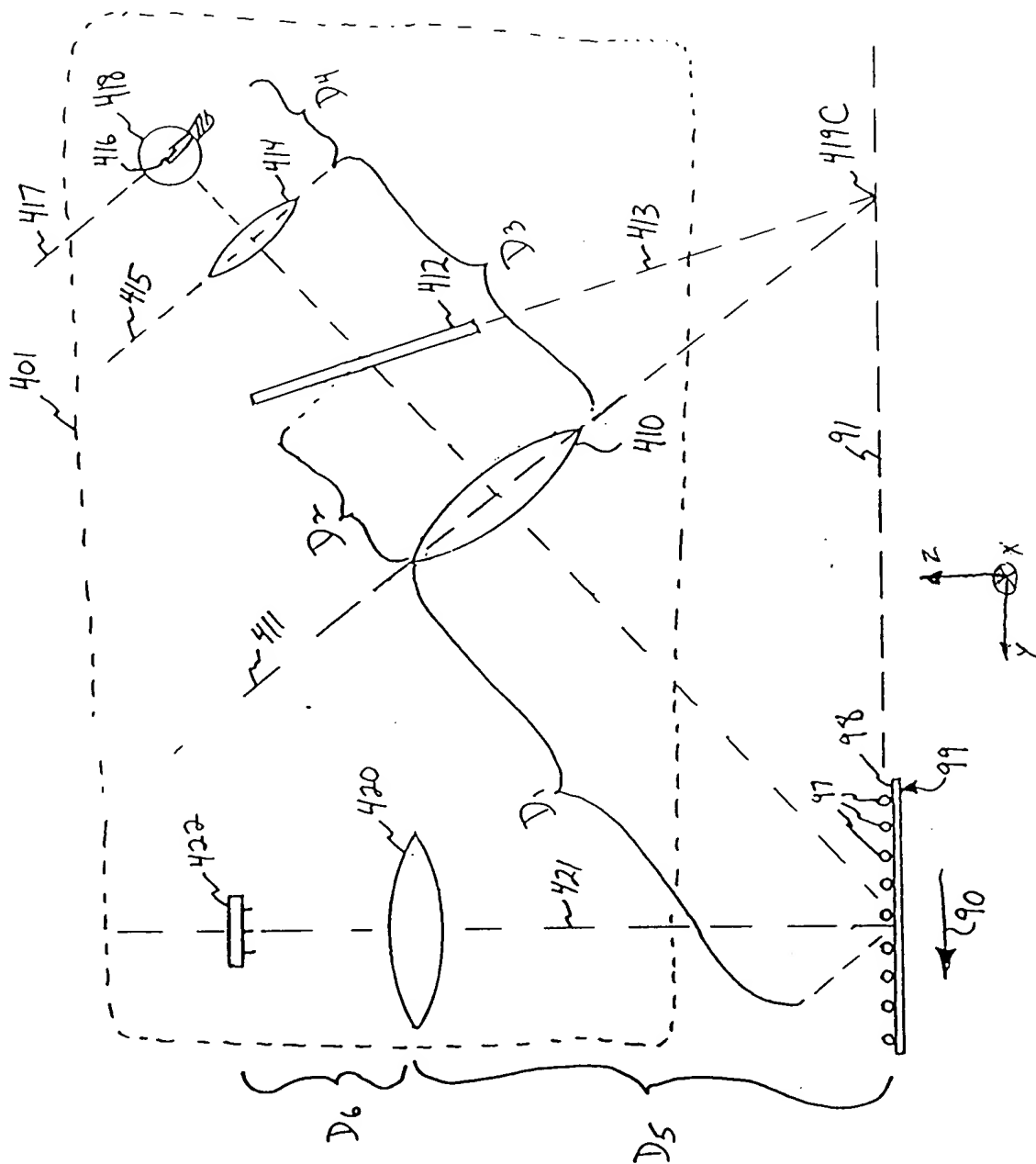


FIG. 4C

FIG. 4D is a schematic diagram of a system 400D for detecting a target 402. The system 400D includes a transmitter 403, a receiver 404, and a processor 405. The transmitter 403 is configured to transmit a signal 421 to the target 402. The receiver 404 is configured to receive a signal 422 from the target 402. The processor 405 is configured to process the received signal 422 and determine the location of the target 402. The system 400D also includes a display 406, which is configured to display the location of the target 402. The system 400D is further configured to provide real-time feedback to the user.

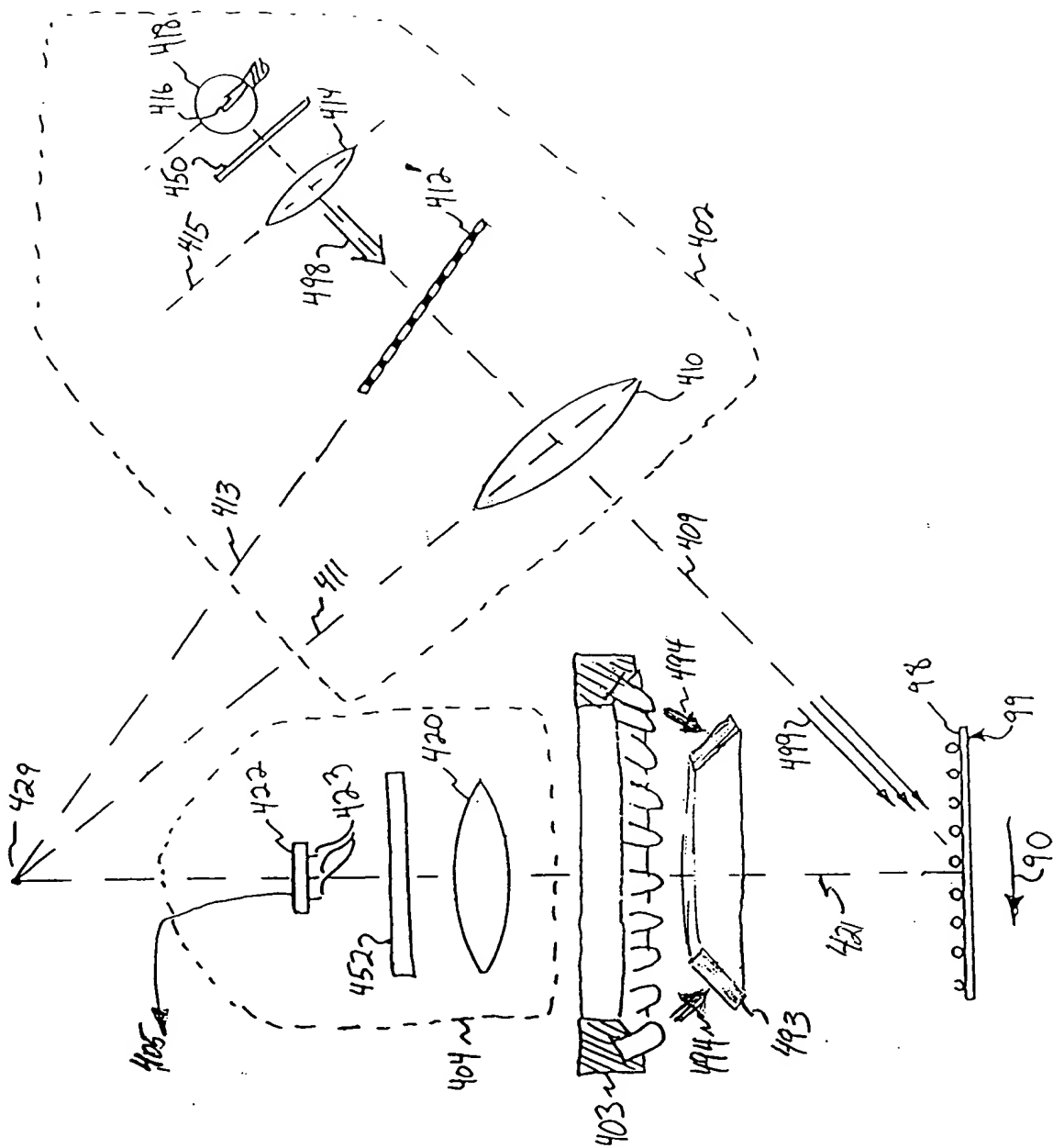


FIG. 4D

FIG. 4E is a perspective view of the structure 409, showing the layers 412 and 472, and the wavy line 499. The structure 409 is a rectangular block with a wavy line 499 on its top surface. The layers 412 and 472 are indicated by dashed lines. A coordinate system with X, Y, and Z axes is shown in the upper right corner.

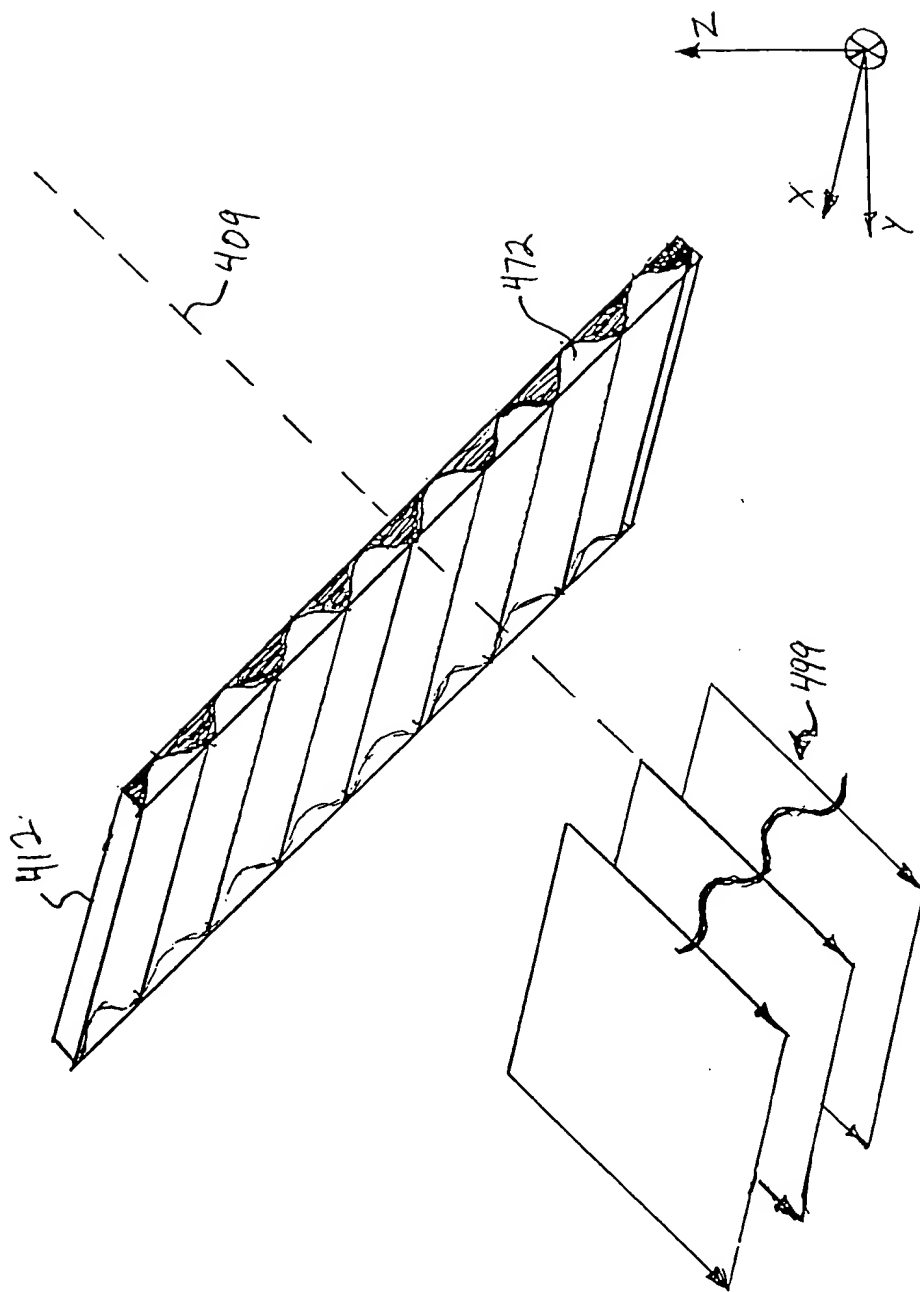
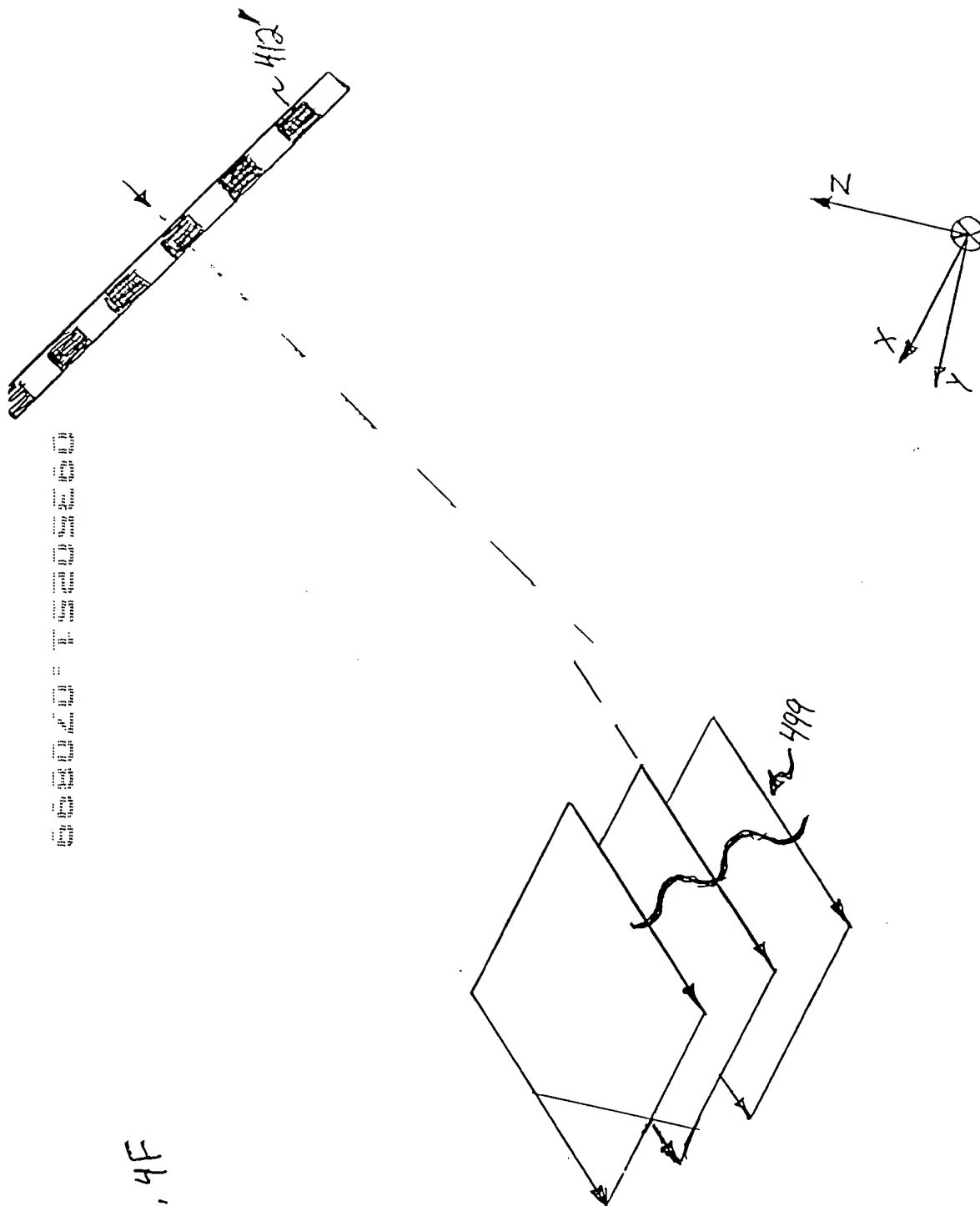


FIG. 4E

FIG. 4F



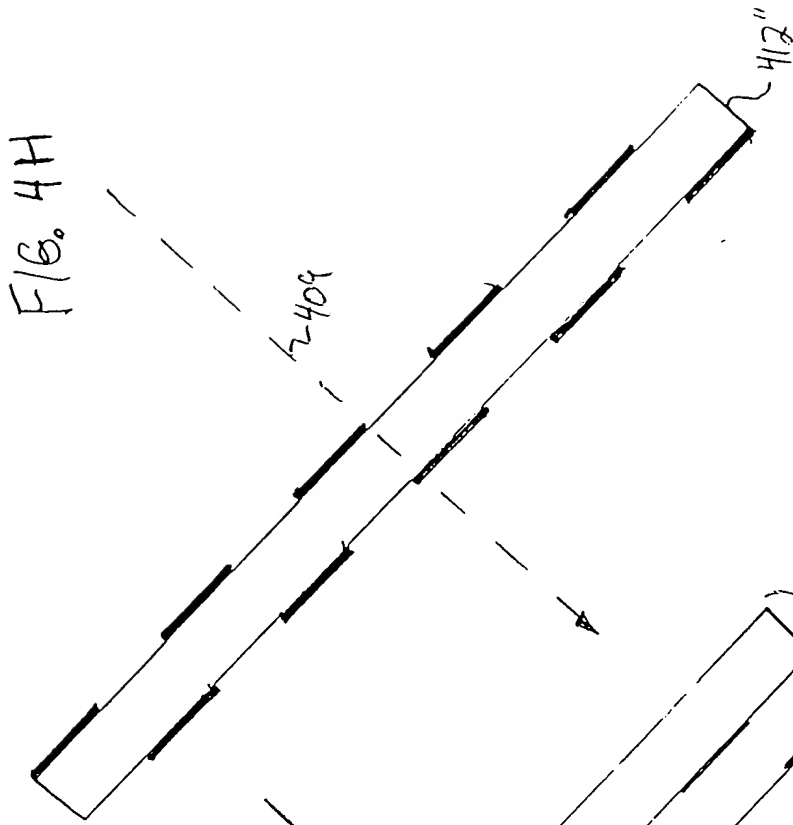


FIG. 4H

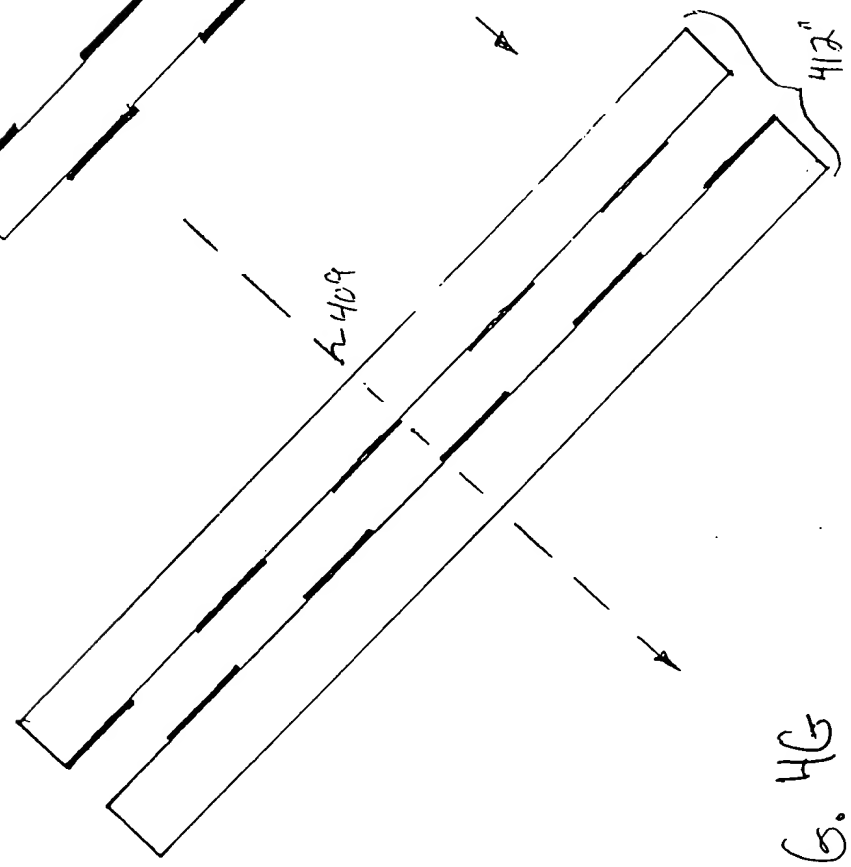


FIG. 4G

FIG. 4I is a schematic diagram of a system for measuring the distance between two points in a 3D space. The system includes a first camera 419A and a second camera 419B, which are positioned at different locations and orientations. The cameras are used to capture images of a target object 400I. The images are then processed to determine the distance between two points on the object. The system also includes a coordinate system 410 with X, Y, and Z axes. The distance between the two points is indicated by a double-headed arrow 411. The system is shown in a perspective view, with dashed lines indicating the field of view of the cameras. The target object 400I is shown in a perspective view, with dashed lines indicating the location of the two points. The system is labeled with various reference numerals, including 419A, 419B, 400I, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

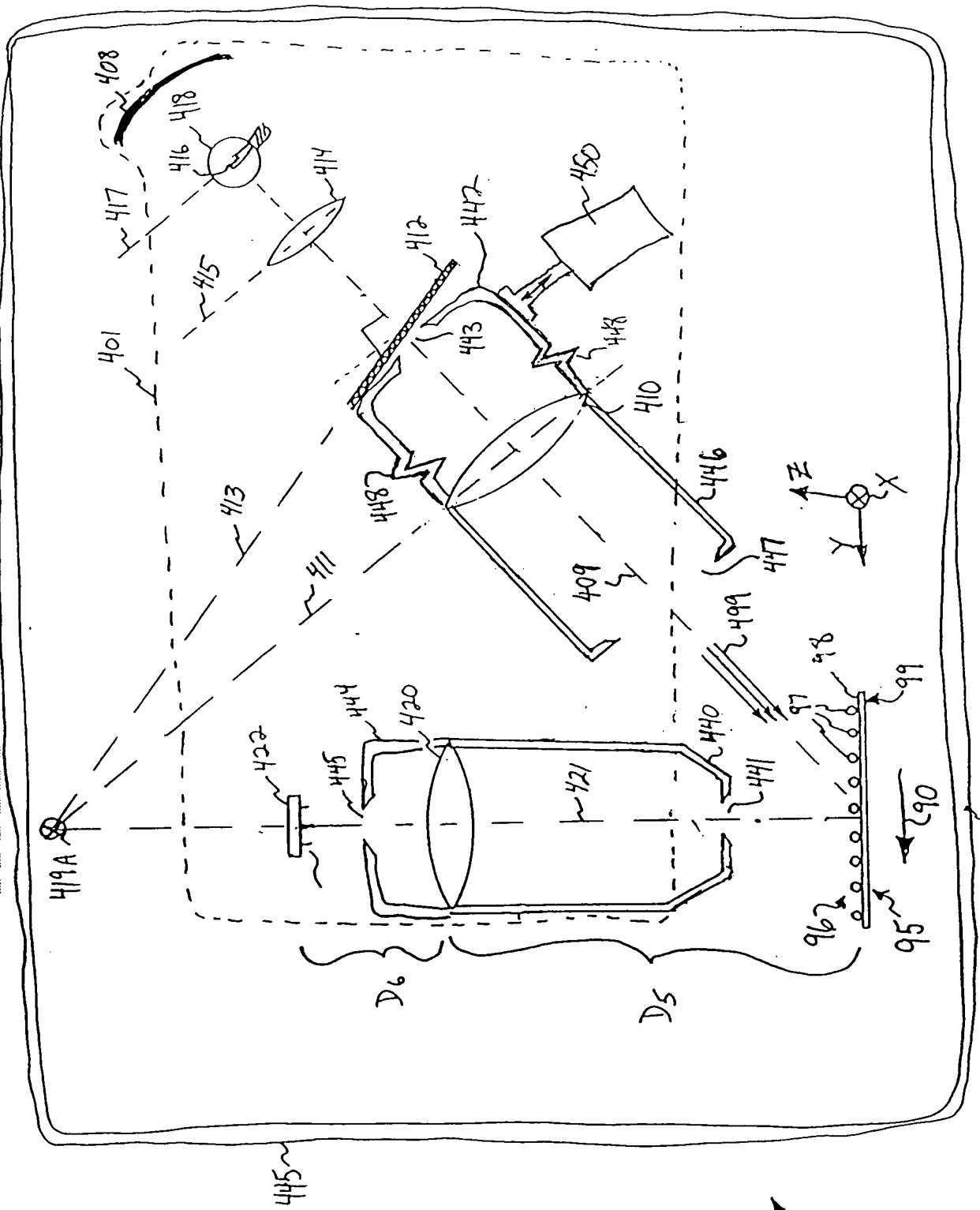
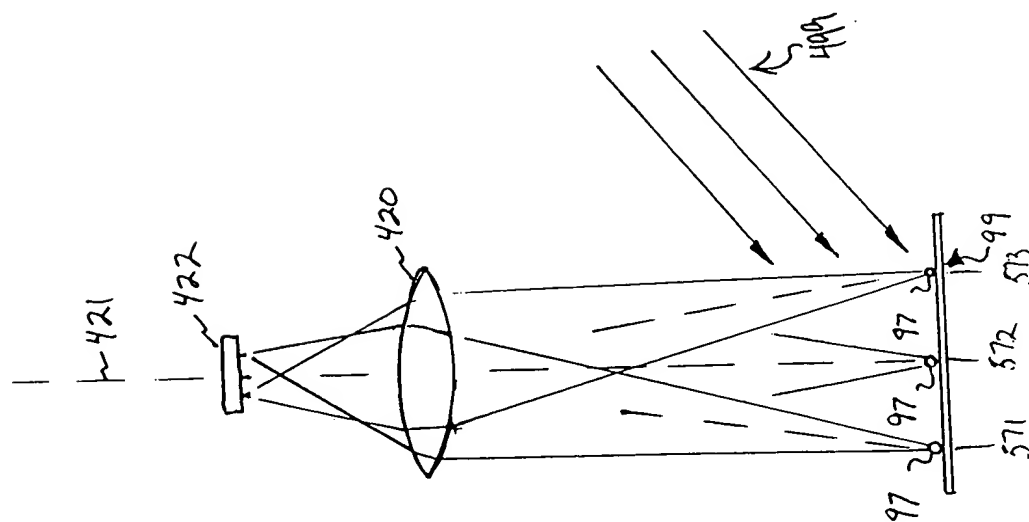
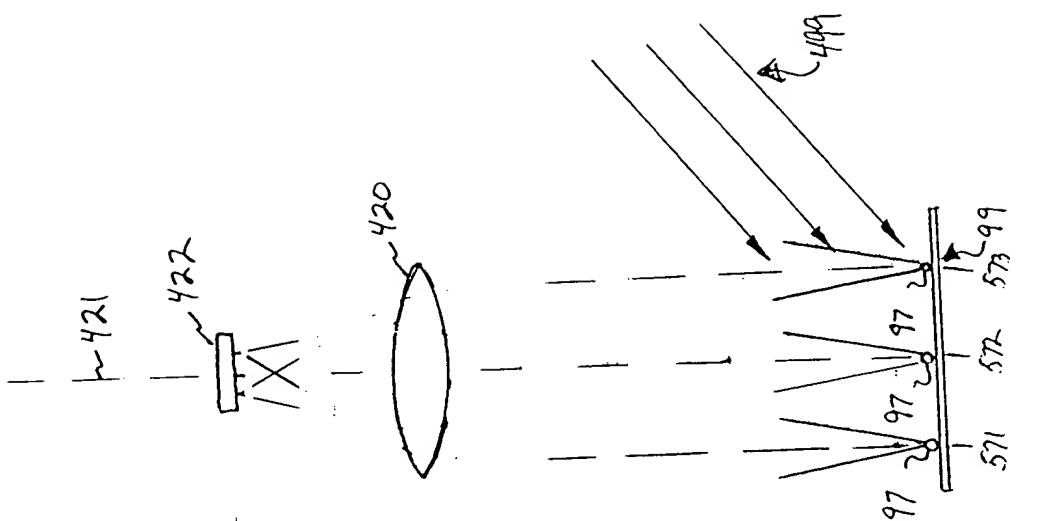


FIG. 4I



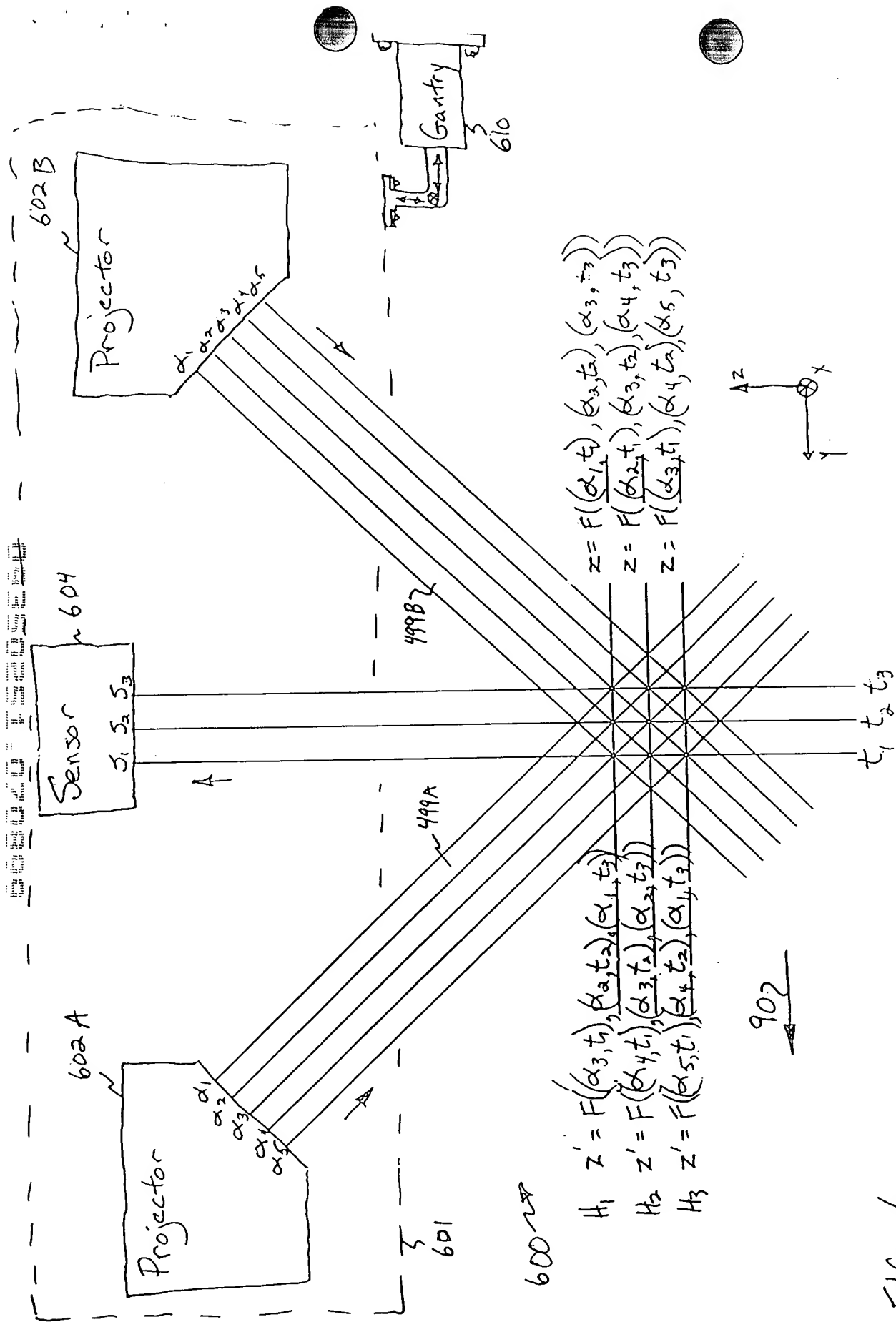


FIG. 6

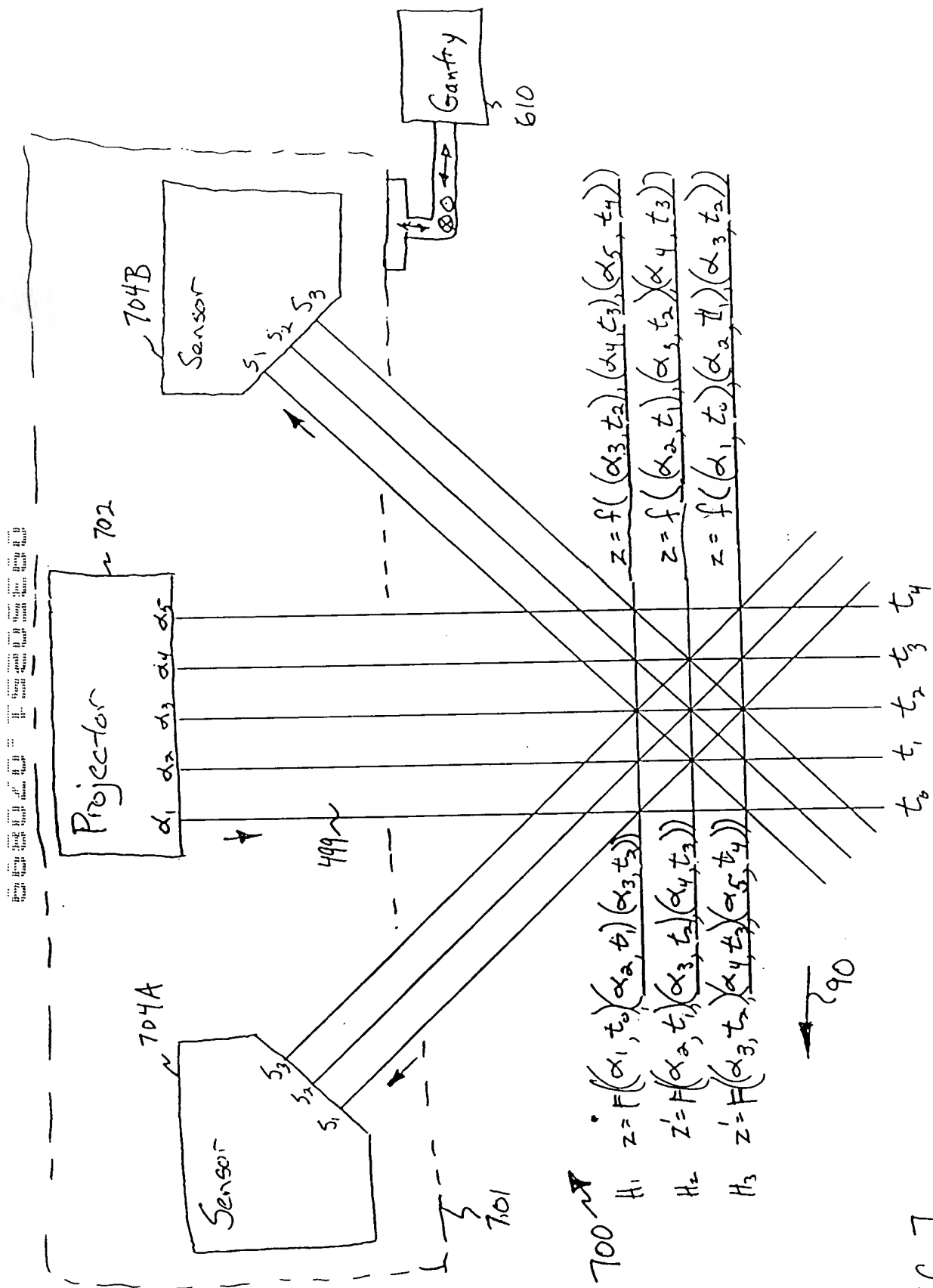
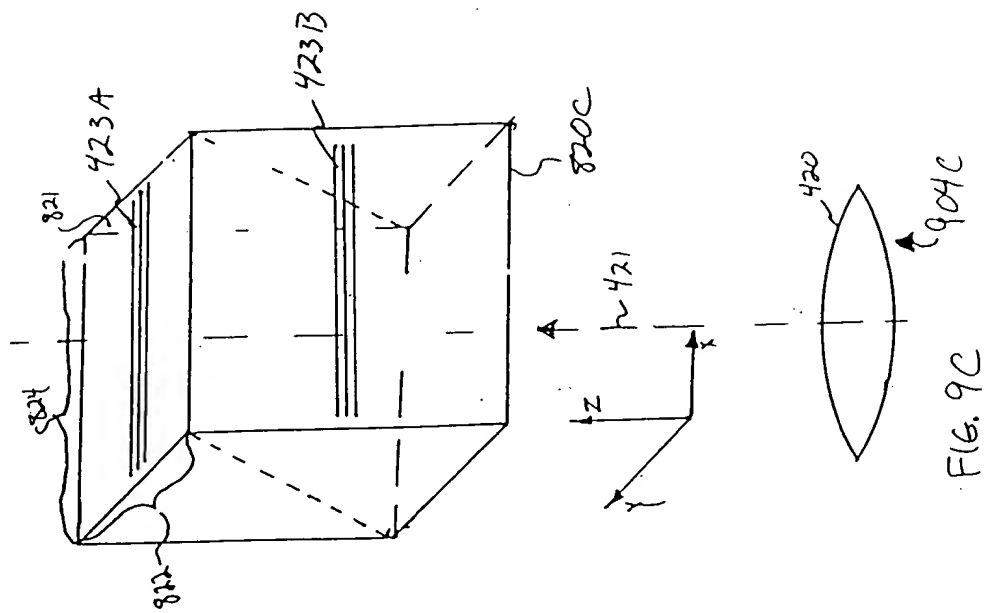
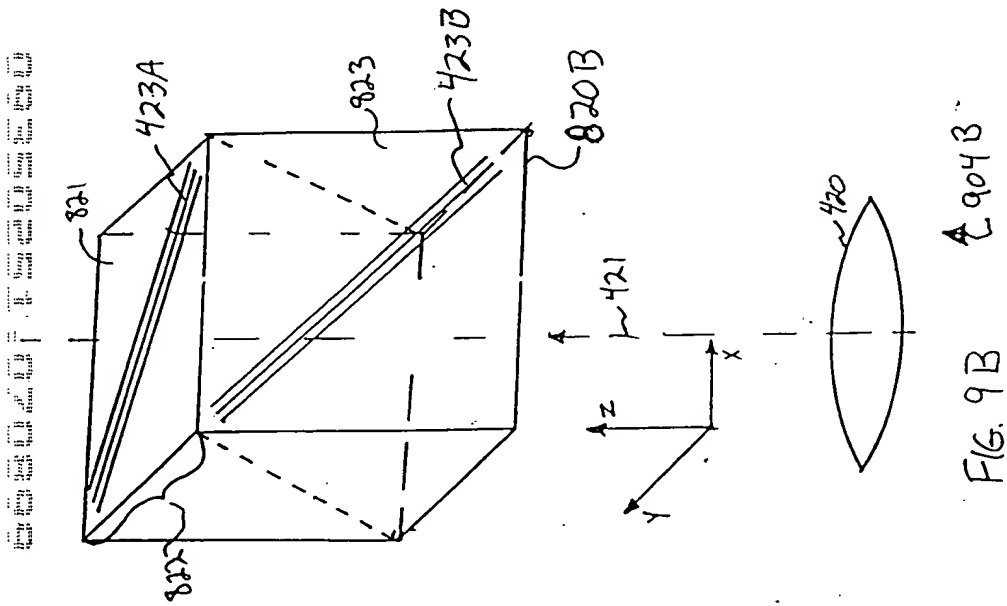
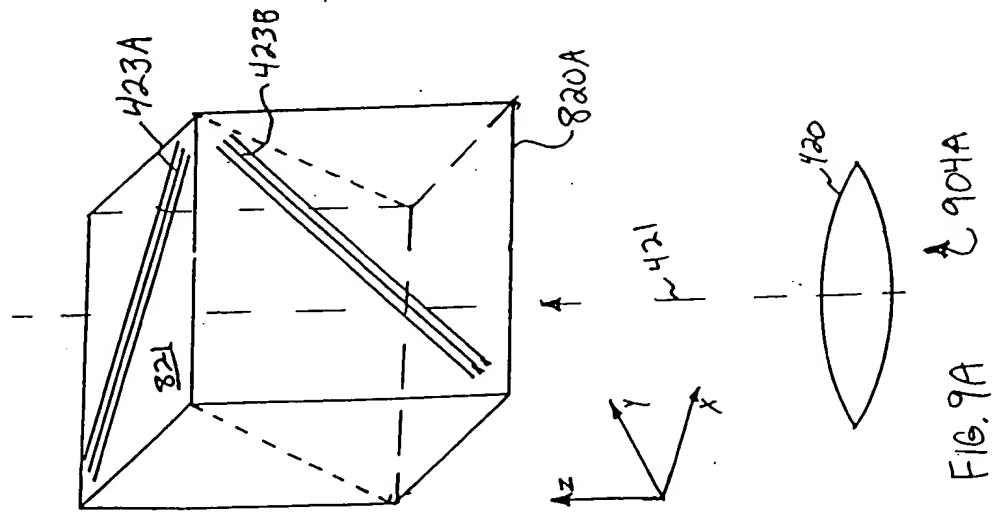


FIG. 7



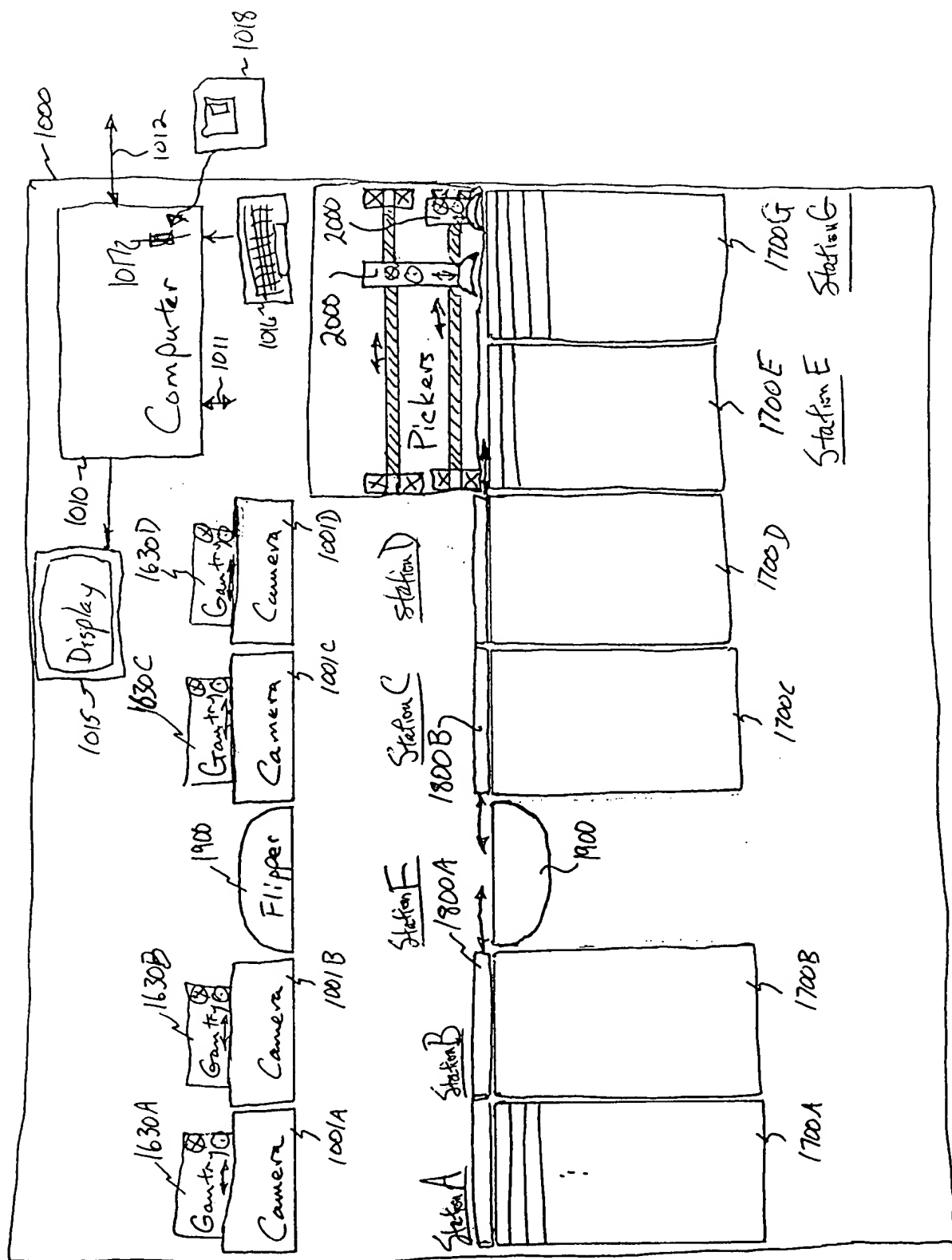
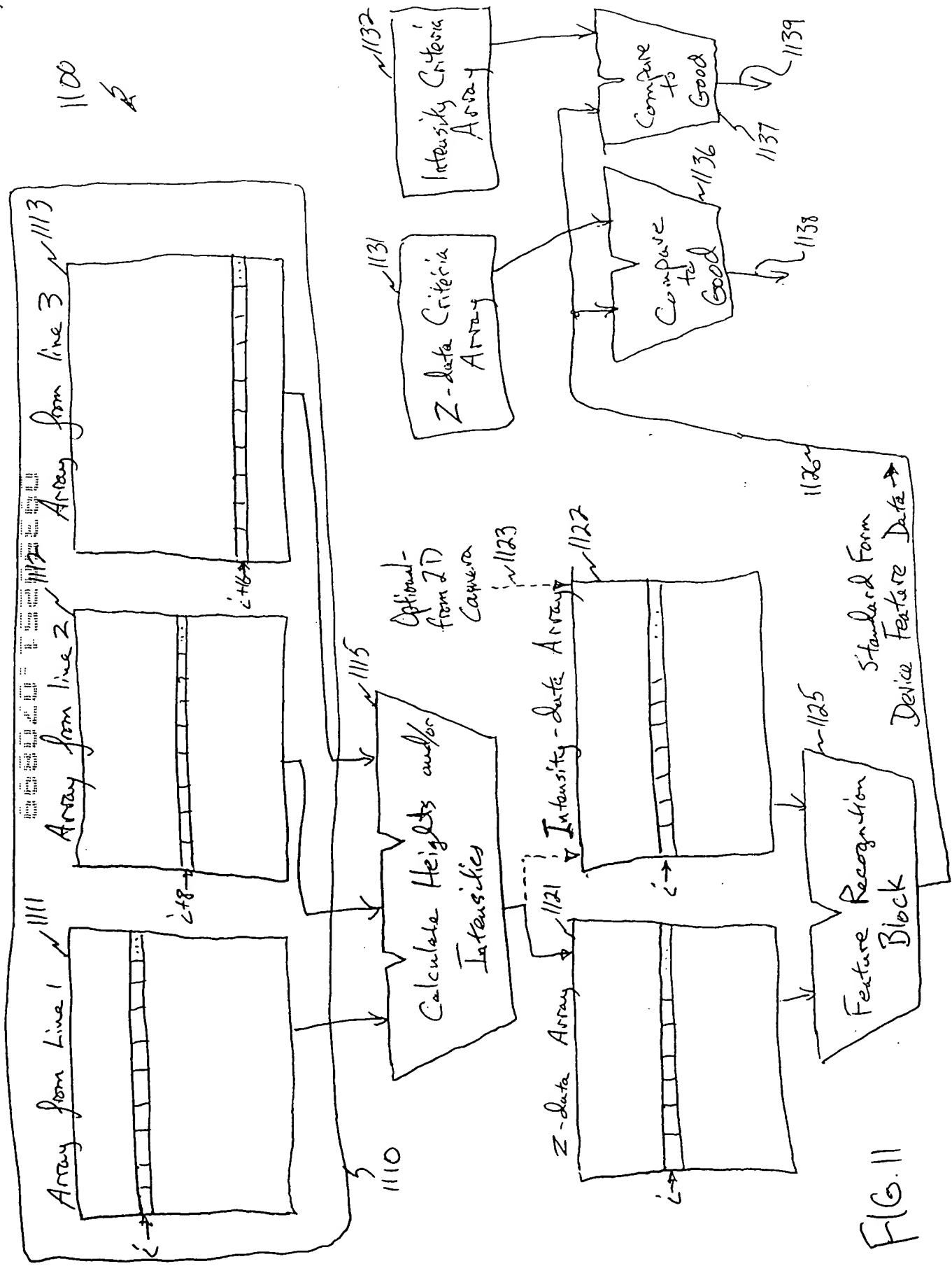


FIG. 10



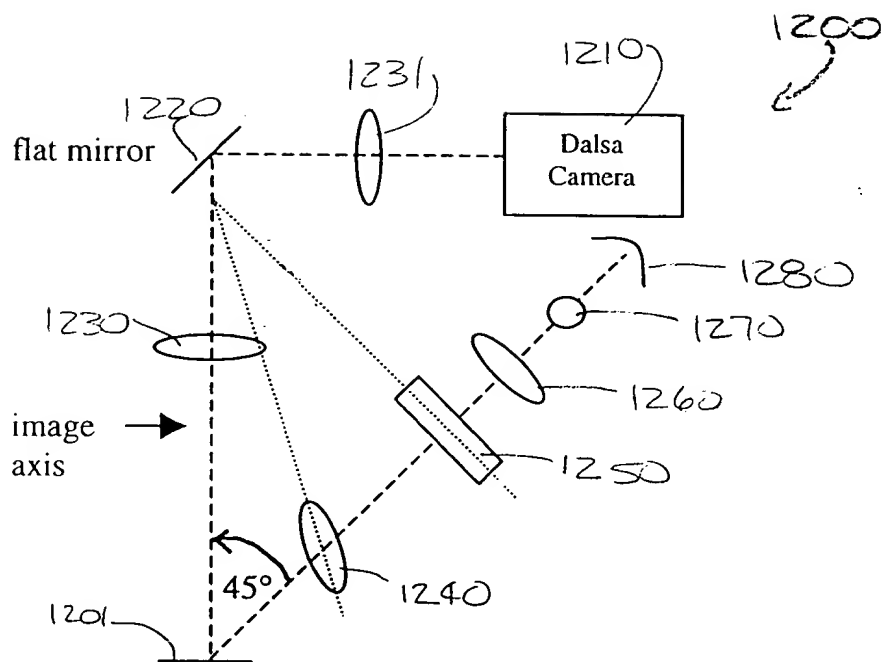


Figure 12

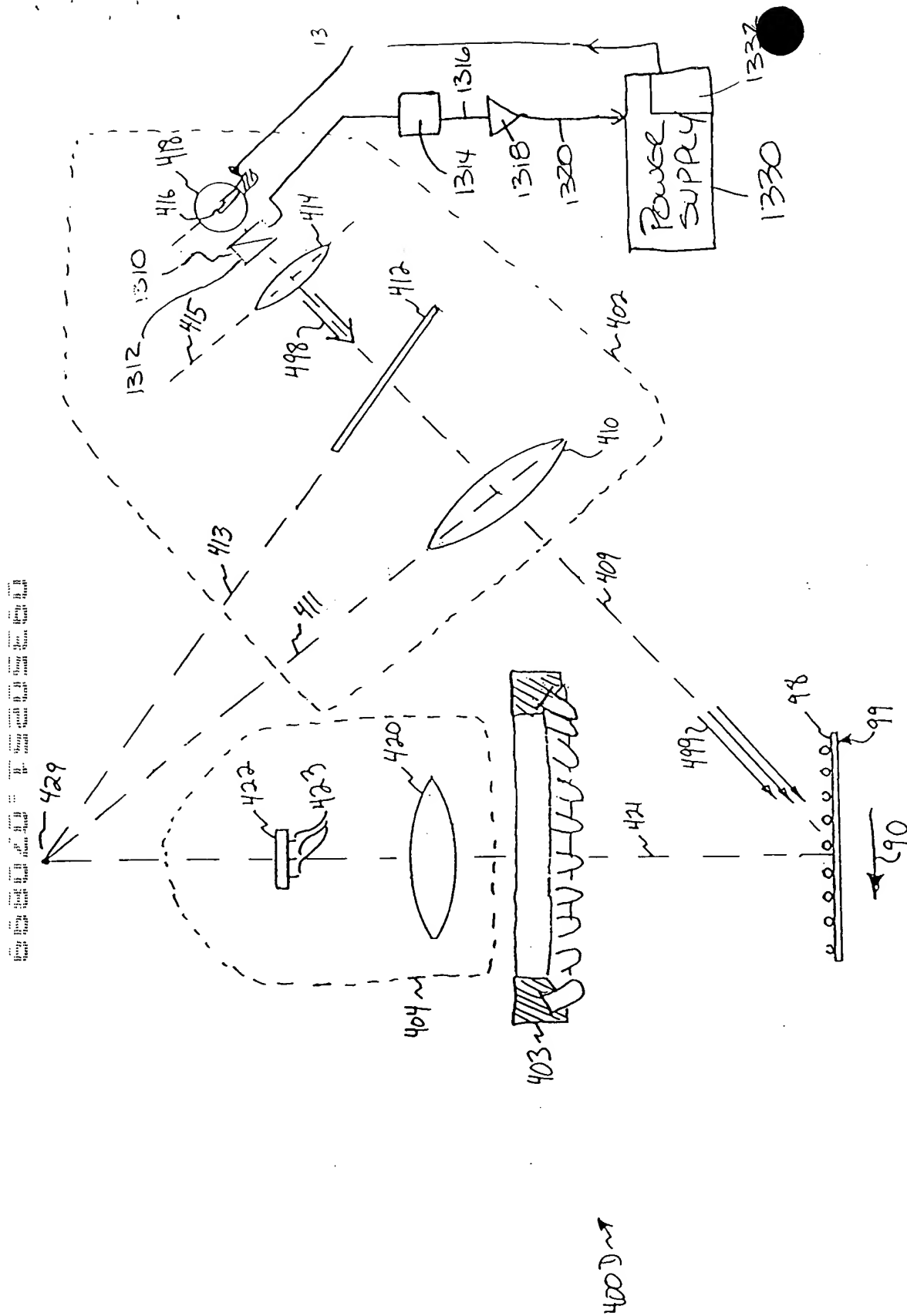


FIG. 13A

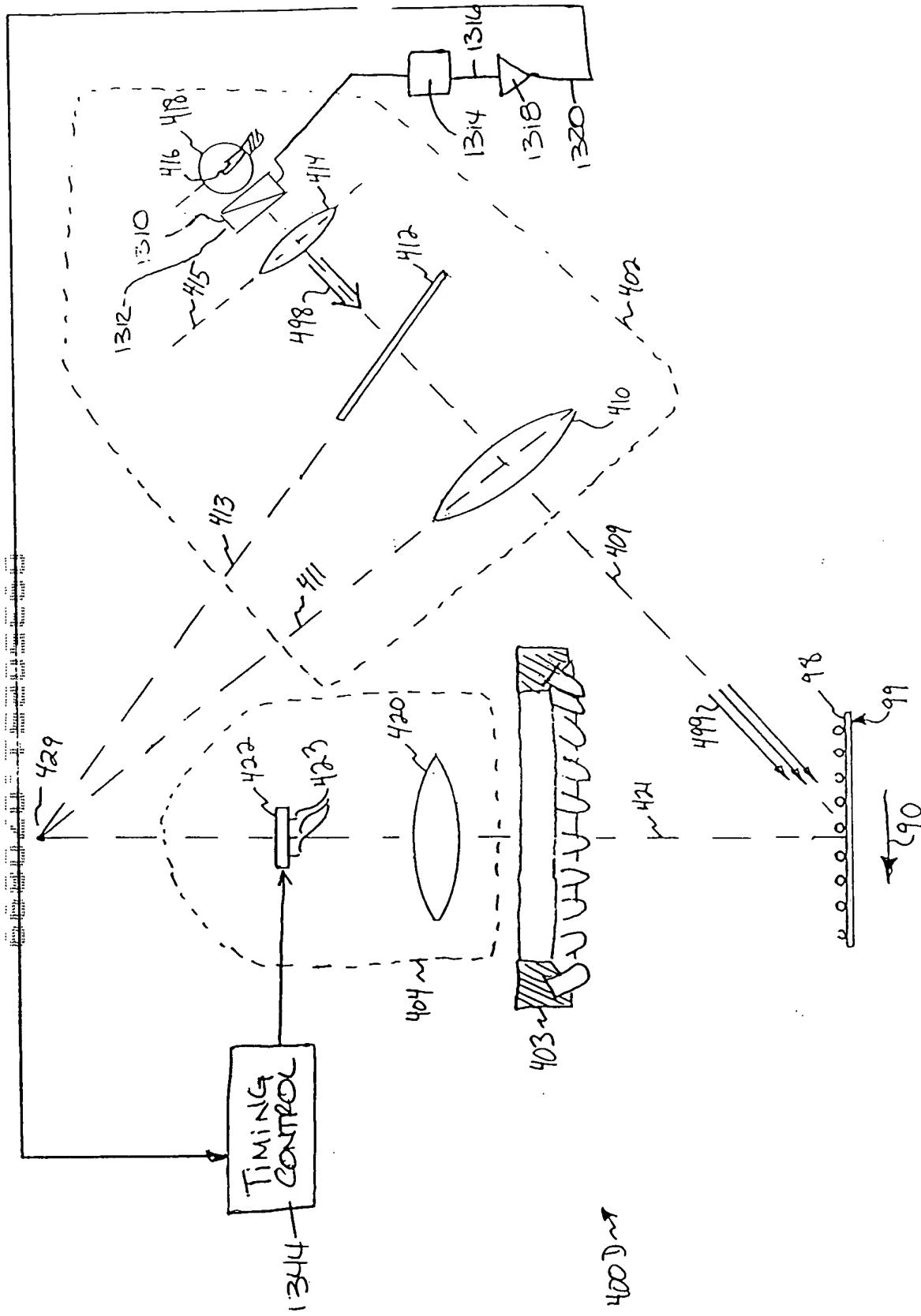


FIG. 13B

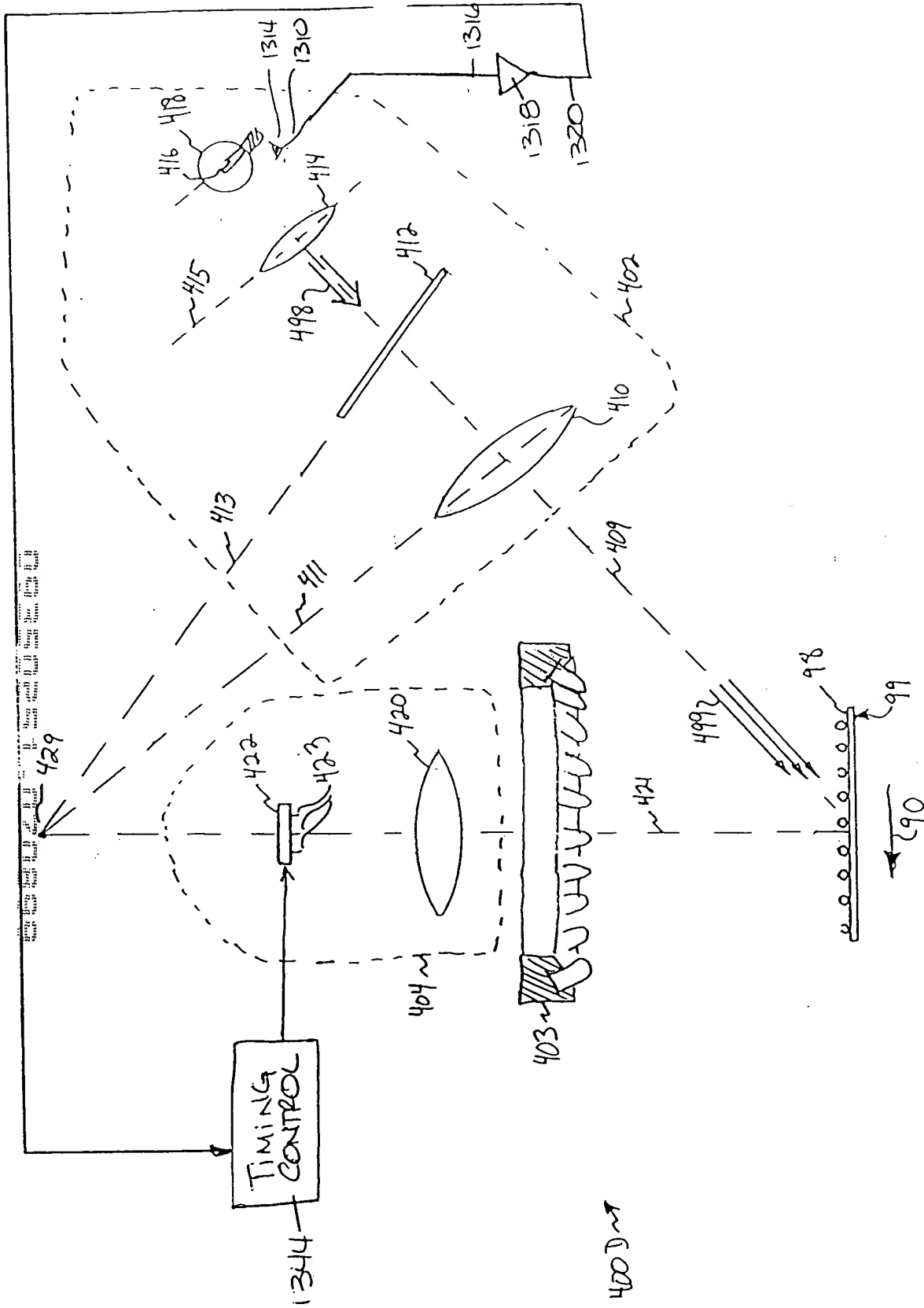


FIG. 13C

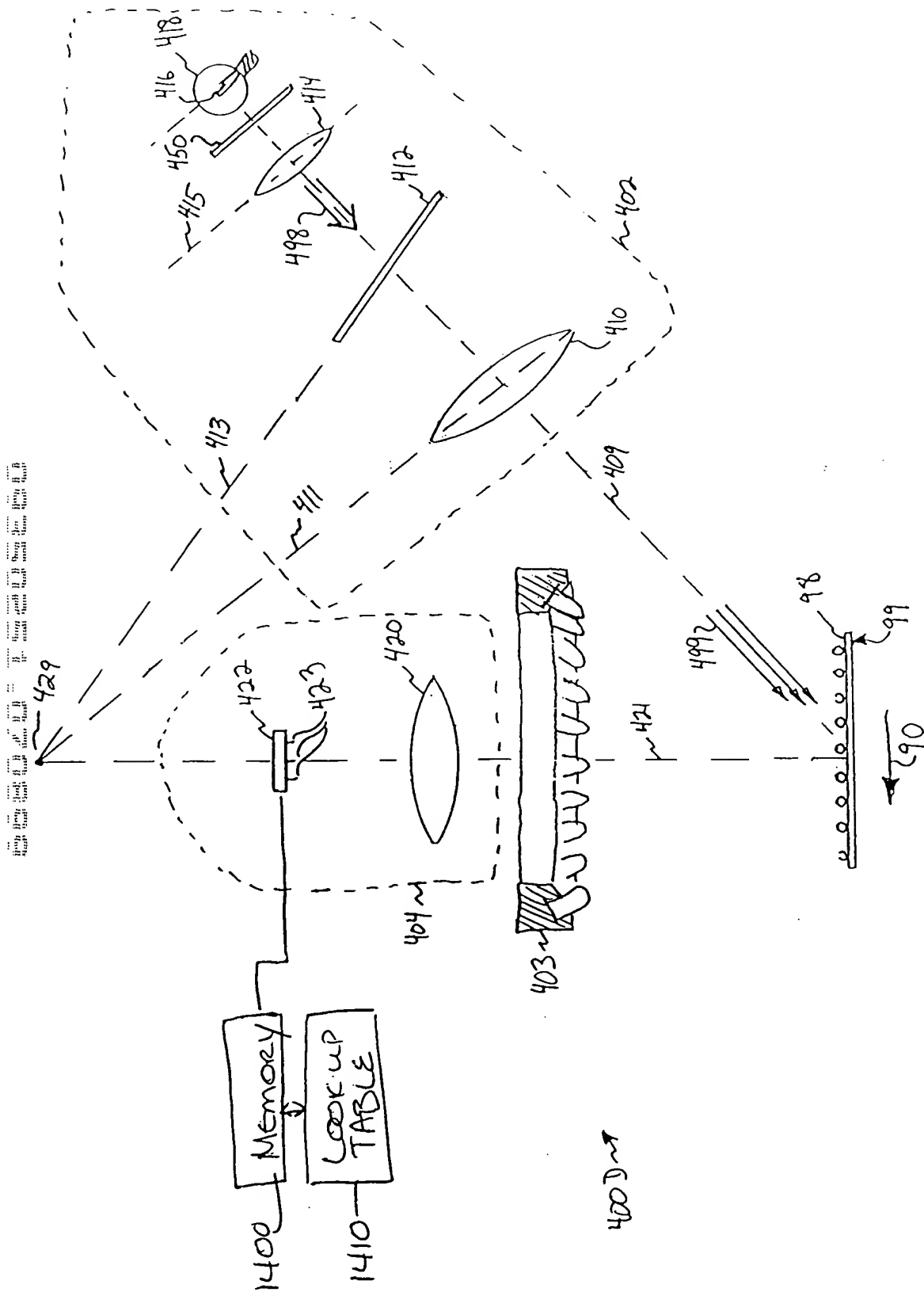


FIG. 14A

1410

TABLE LOOKUP

Pixel #	Correction Value (Condition A Light Source A)	Correction Value (Condition B Light Source A)	Correction Value (Condition A Light Source B)	...
.
.
.
X	Y	Z	W	Q

1412

Fig. 14B

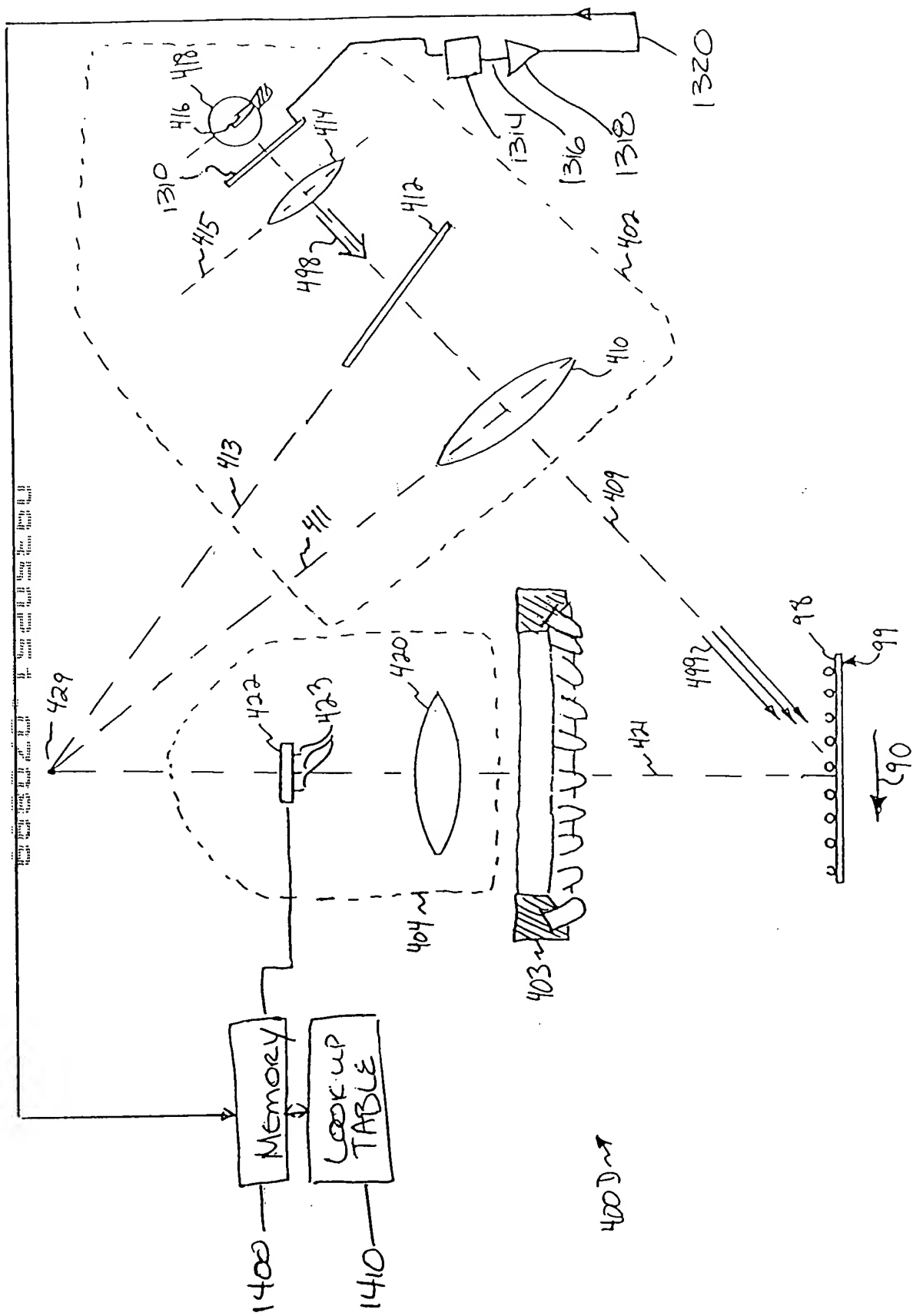


FIG. 14C

FIG. 15 is a schematic diagram of a system 1500 for cooling a device 1540. The system 1500 includes a heat exchanger 1520, a pump 1532, a reservoir 1534, and a fan array 1510. The heat exchanger 1520 has a hot side 1522 and a cool side 1524. The device 1540 is connected to the hot side 1522. The pump 1532 is connected to the cool side 1524. The reservoir 1534 is connected to the pump 1532. The fan array 1510 is connected to the cool side 1524. The system 1500 is configured to circulate a fluid from the device 1540 through the heat exchanger 1520, the pump 1532, the reservoir 1534, and the fan array 1510, and back to the device 1540.

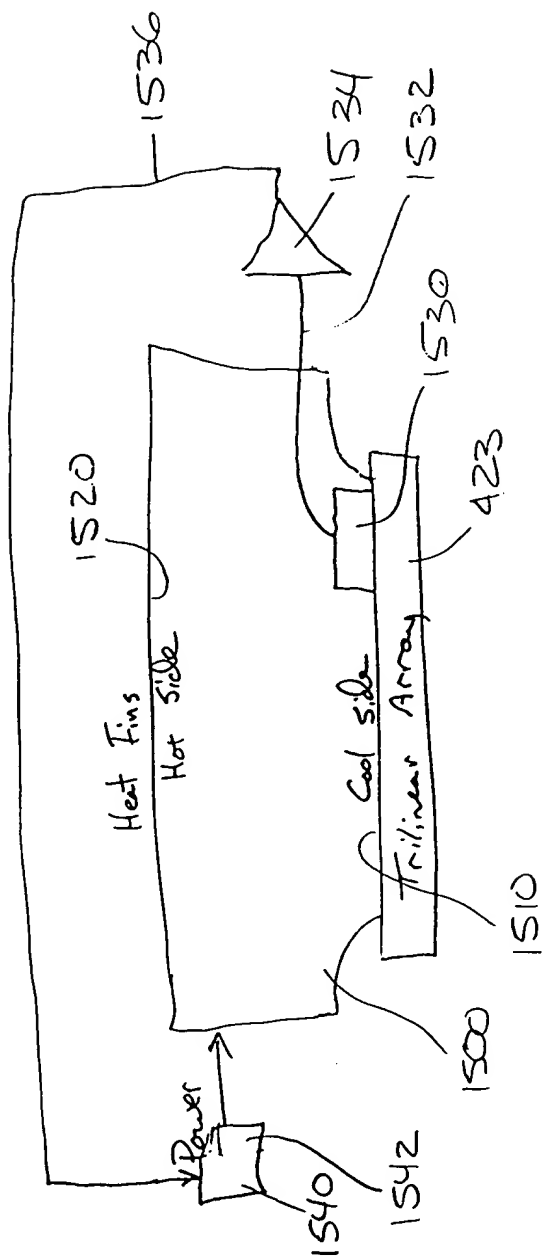


FIG 15

FIG. 16

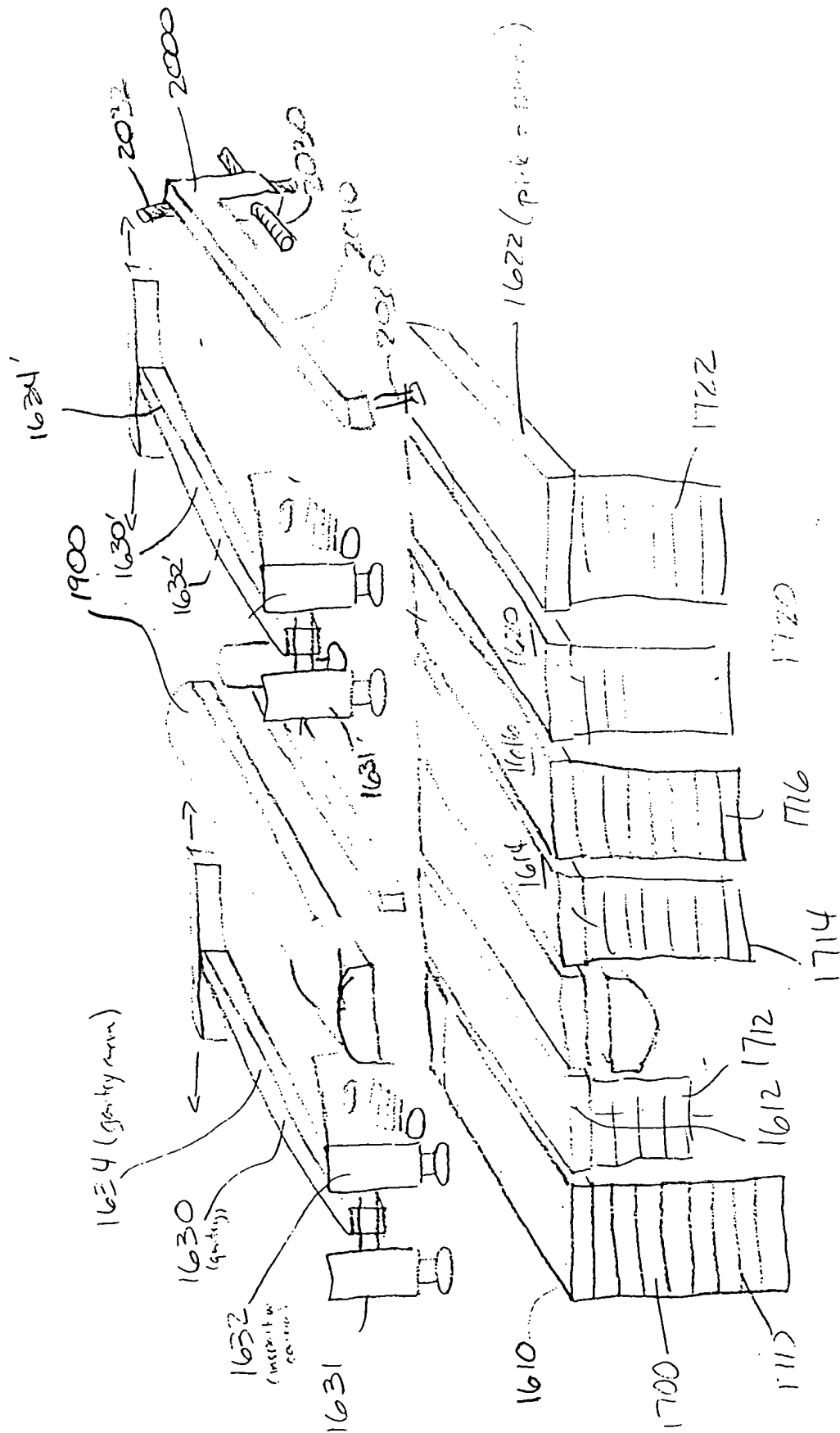
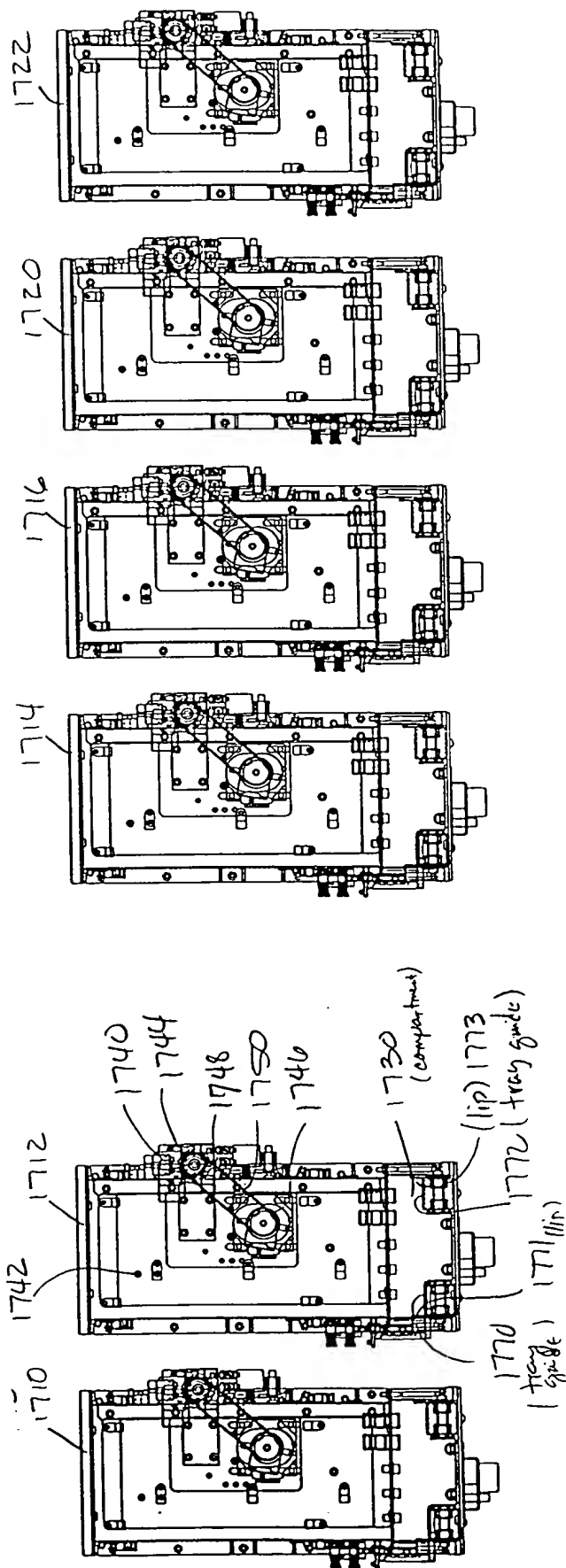
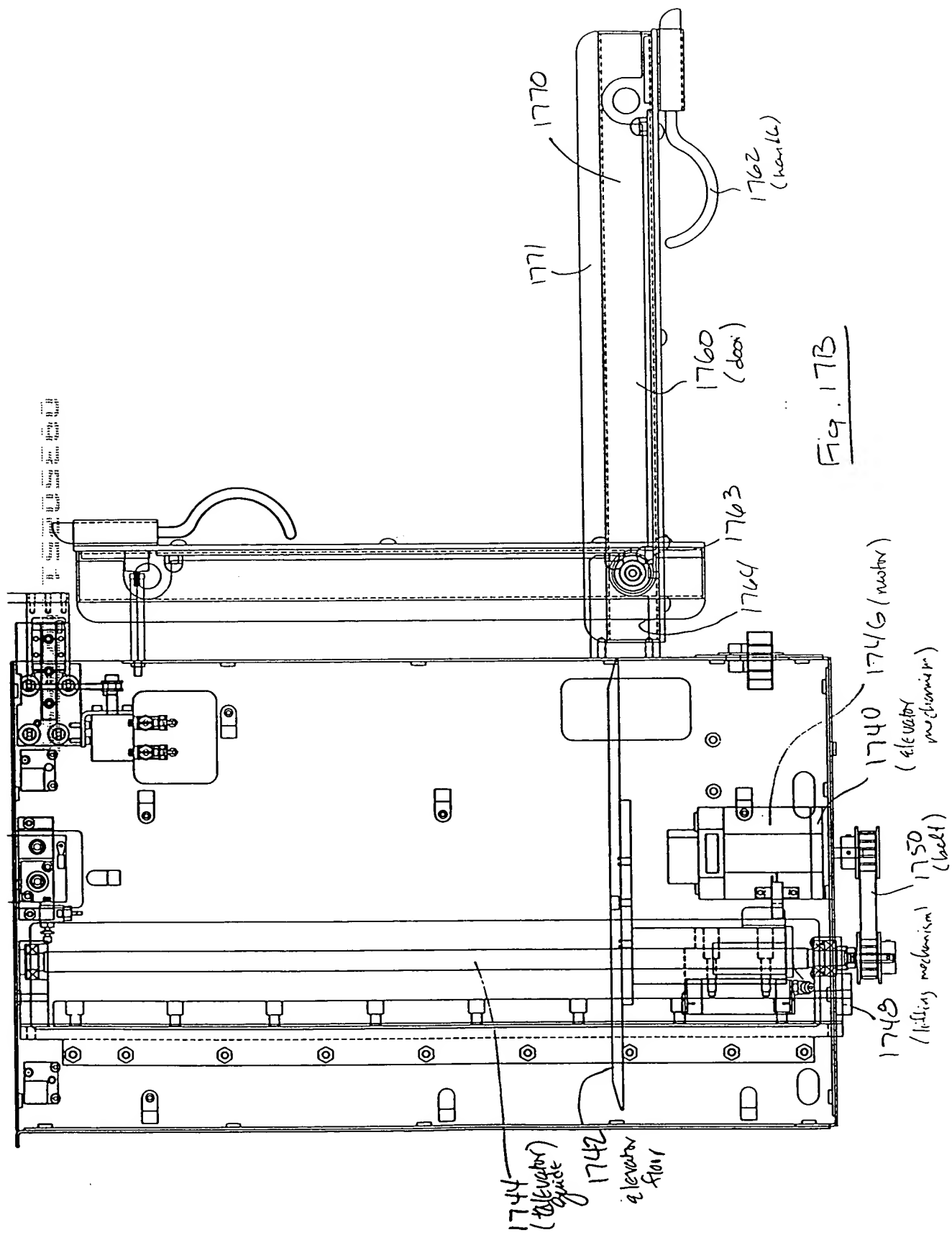


Fig. 16

Fig 17A





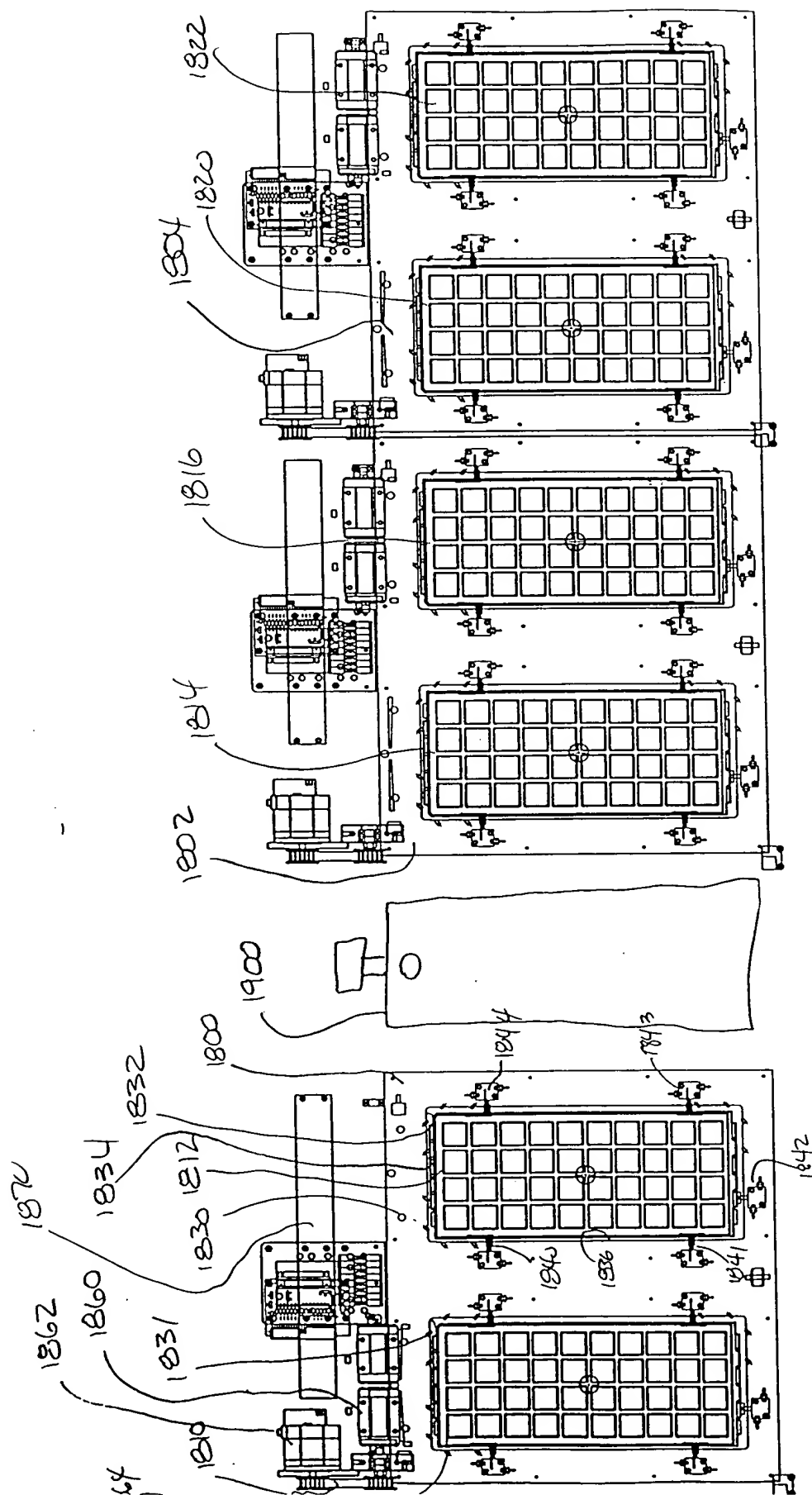
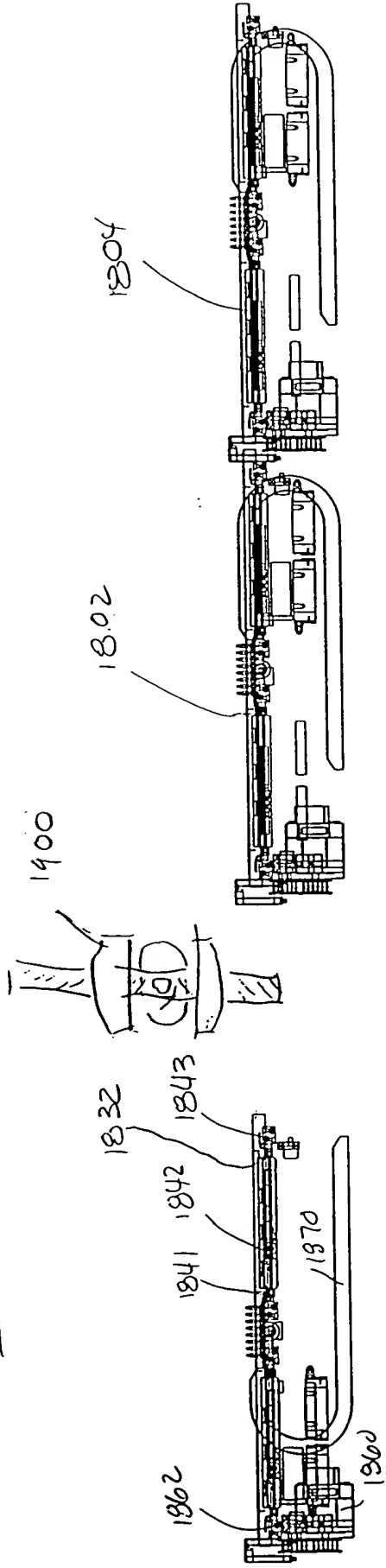


Fig. 12B



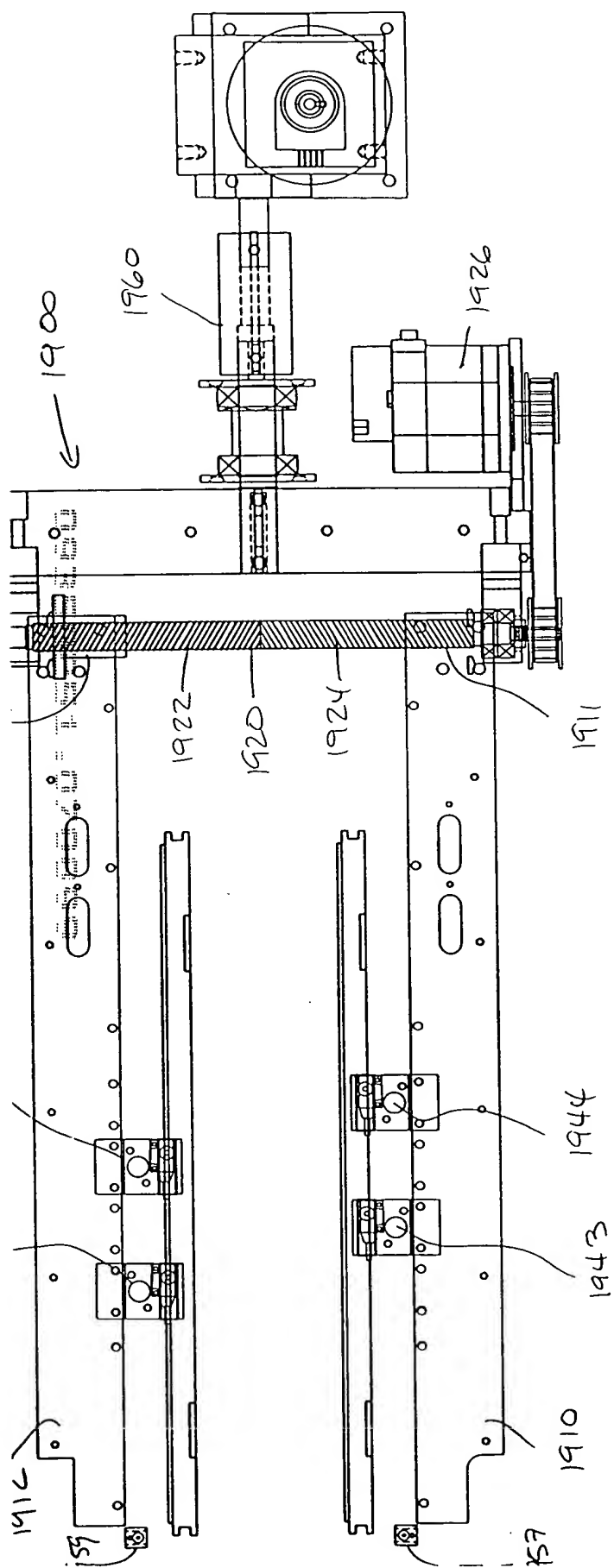


Fig. 19A

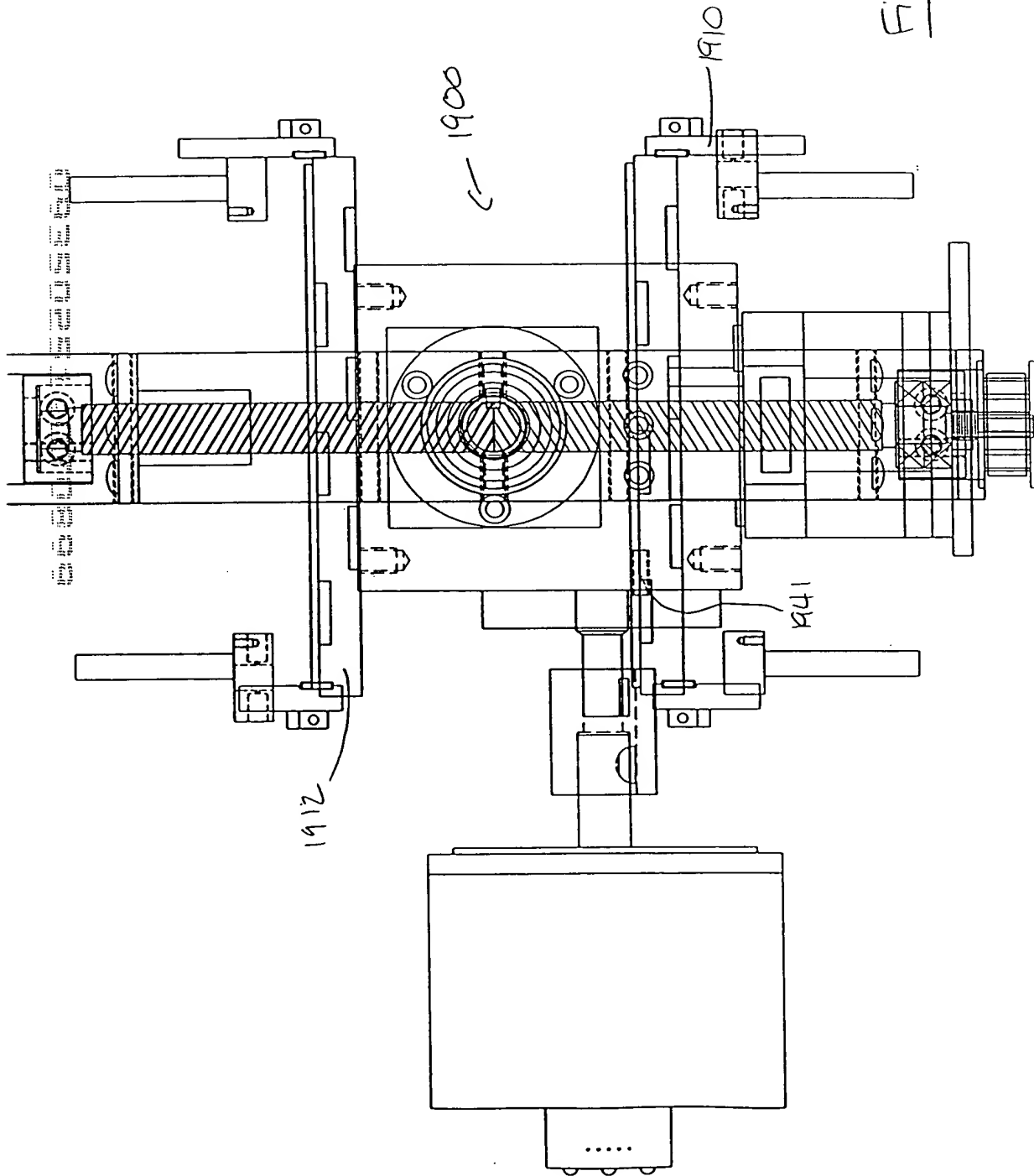


Fig. 19B

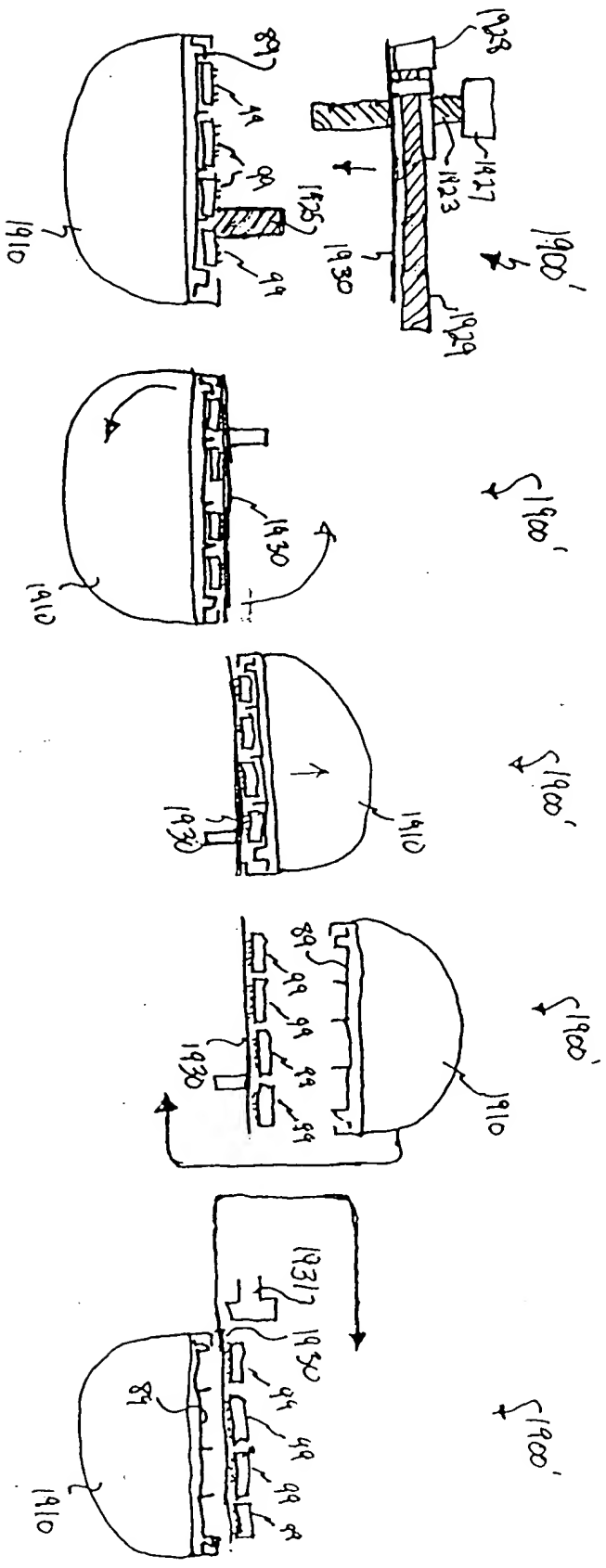


FIG. 19C

FIG. 19D

FIG. 19E

FIG. 19F

FIG. 19G

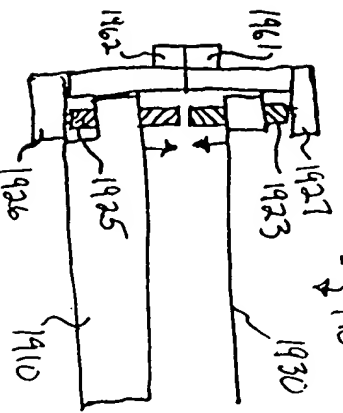


FIG. 19H

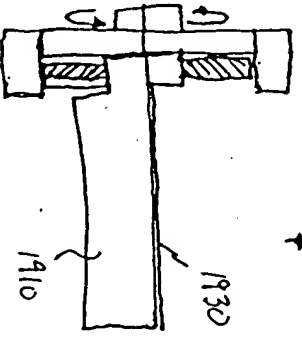


FIG. 19I

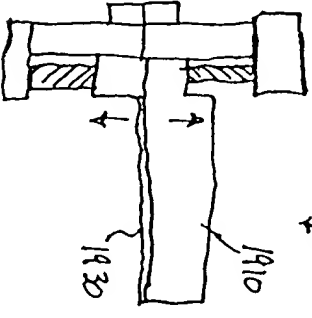


FIG. 19J

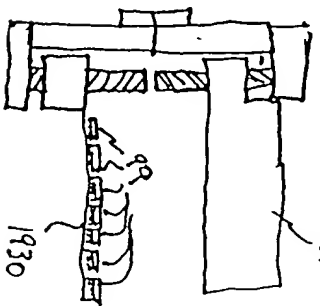


FIG. 19K

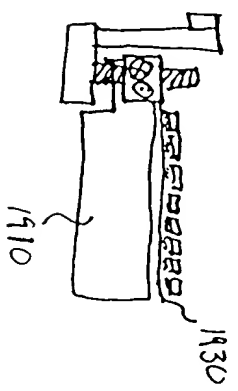


FIG. 19L

FIG. 19C, FIG. 19D, FIG. 19E, FIG. 19F, FIG. 19G, FIG. 19H, FIG. 19I, FIG. 19J, FIG. 19K, FIG. 19L

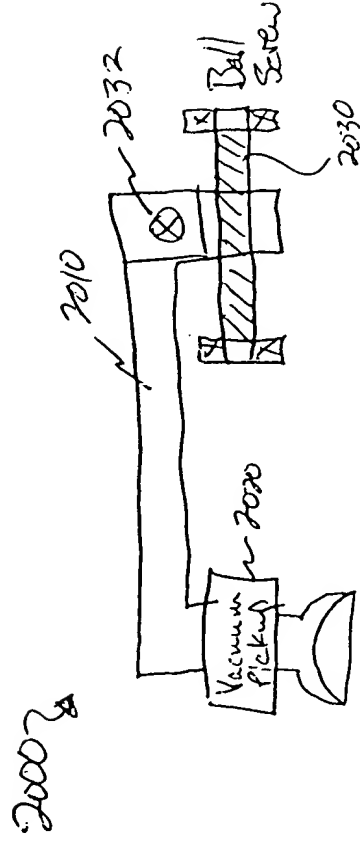


FIG. 20

FIG. 20

2100

2110

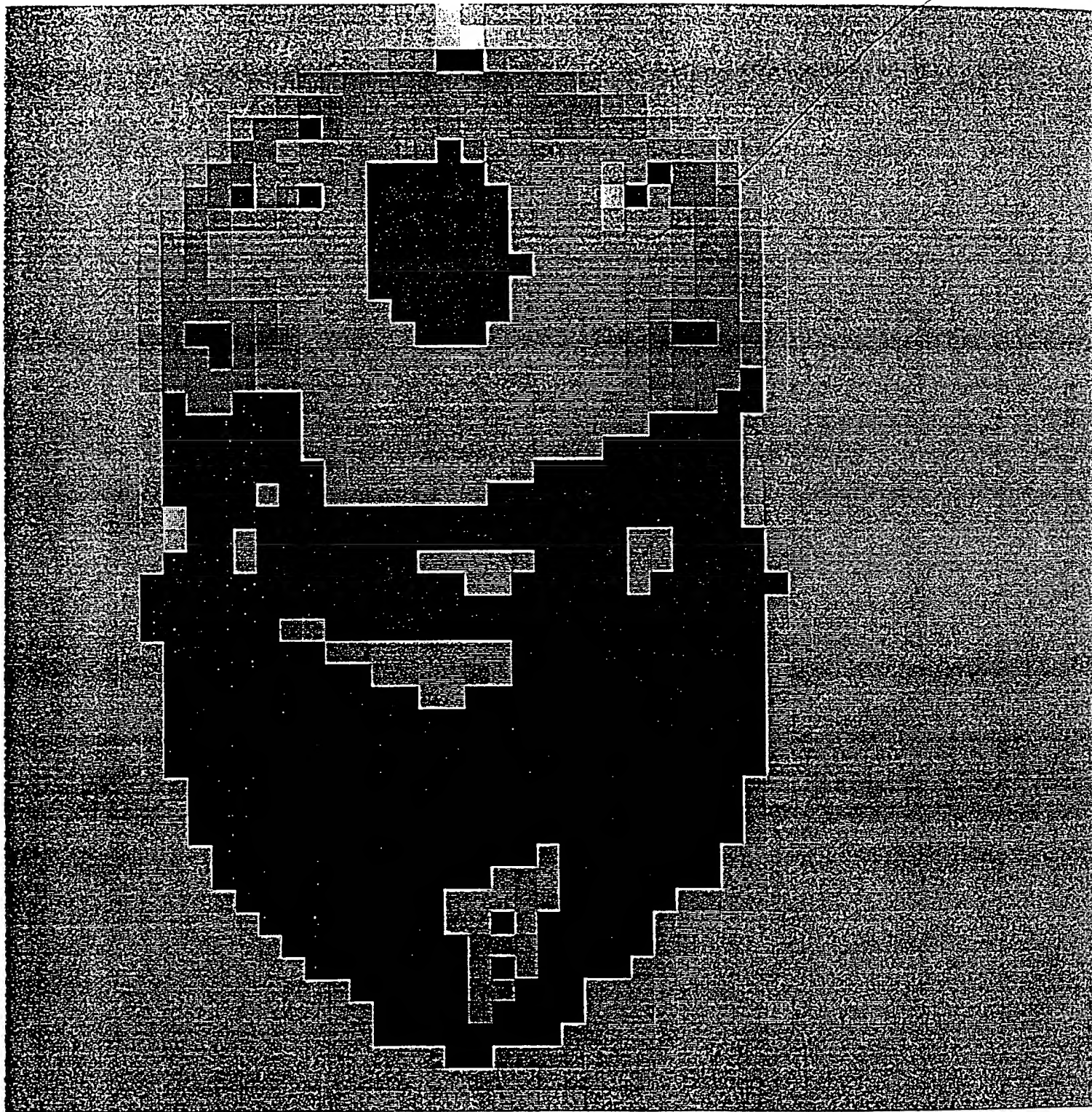


Figure 21